

UNCLASSIFIED

AD NUMBER

AD815683

LIMITATION CHANGES

TO:

Approved for public release; distribution is unlimited.

FROM:

Distribution authorized to U.S. Gov't. agencies and their contractors;  
Administrative/Operational Use; APR 1967. Other requests shall be referred to Aeronautical Systems Div., Wright-Patterson AFB, OH 45433.

AUTHORITY

ASD ltr 29 Nov 1971

THIS PAGE IS UNCLASSIFIED



ASD-TR-67-1

# **STRUCTURAL LOADS DATA FROM C-141A AIRCRAFT**

**ROBERT B. SCHWARTZ**

**UNIVERSITY OF DAYTON  
RESEARCH INSTITUTE**

**TECHNICAL REPORT No. ASD-TR-67-1**

**APRIL 1967**

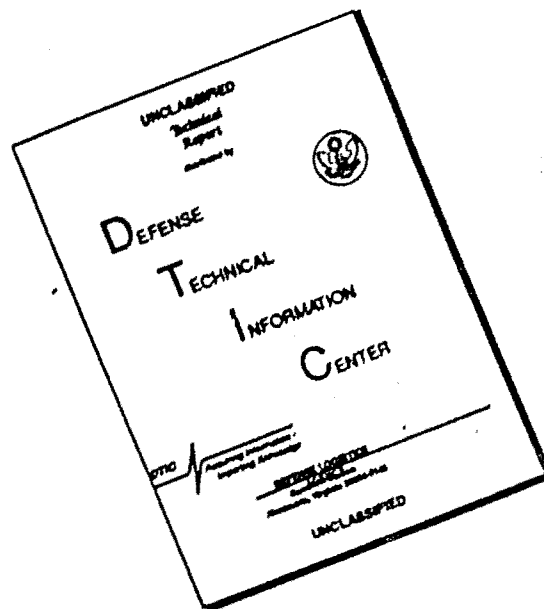
**C-141 SYSTEM PROGRAM OFFICE  
AERONAUTICAL SYSTEMS DIVISION  
AIR FORCE SYSTEMS COMMAND  
WRIGHT-PATTERSON AIR FORCE BASE, OHIO**

**This document is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with the prior approval of the C-141 Systems Program Office.**

**AD 815683**



# DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.



## NOTICES

When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

Copies of this report should not be returned to the Aeronautical Systems Division unless return is required by security considerations, contractual obligations, or notice on a specific document.



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS AERONAUTICAL SYSTEMS DIVISION (AFSC)  
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433



REPLY TO  
ATTN OF

ASZL/SELA/R&D 7-7

25 Aug 67

SUBJECT

ASD TR 67-1, Structural Loads Data from C-141A Aircraft

TO Recipient of ASD TR 67-1

**AD 815683**

In April 1967 the subject report presenting structural information on operational C-141 aircraft was distributed. Shortly thereafter, it was discovered that certain tabulations in this report were not complete. As a result, a revised copy of ASD TR 67-1 is hereby submitted for your information. It is respectfully requested that the original be destroyed.

FOR THE COMMANDER

*Howard E. Kugel*  
HOWARD E. KUGEL  
Chief, Airframe Division  
C-141/Materials Handling  
Engineering Office

Atch  
ASD TR 67-1



# **STRUCTURAL LOADS DATA FROM C-141A AIRCRAFT**

**ROBERT B. SCHWARTZ**

This document is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with the prior approval of the C-141 Systems Program Office.



## FOREWORD

This final report on the C-141A Aircraft Flight Loads Data Program was prepared by the Aerospace Mechanics Research group of the University of Dayton Research Institute, Dayton, Ohio under Air Force Contract AF 33(657)-14424. This program was initiated by Mr. Leo A. Wack and Lt. R. S. Szacik of the C-141 System Program Office, Aeronautical Systems Division, Air Force Systems Command at Wright-Patterson Air Force Base, Ohio. In April 1965 Lt. Raymond J. Veldman of the C-141 System Program Office was appointed project monitor and was also responsible for the initiation of the Ground Loads Study phase of the program.

The work described herein was accomplished during the period of 19 July 1965 through 31 December 1966. This program was conducted by UDRI under the general supervision of Mr. Dale H. Whitford, Project Supervisor, with the author assigned as the project engineer.

The author gratefully acknowledges the cooperation and assistance provided by personnel of the C-141 System Program Office, MAC Air Weather Service, Charleston Air Force Base, Dover Air Force Base, Tinker Air Force Base, Travis Air Force Base, and the 22nd Joint Test Force at Travis Air Force Base.

This technical report has been reviewed and is approved.

*Howard E. Kugel*  
HOWARD E. KUGEL  
Chief, Airframe Division  
C-141/Materials Handling  
Engineering Office



## ABSTRACT

The primary purpose of this report is to present the structural load history information and the atmospheric turbulence data acquired and reduced for the C-141A Aircraft Flight Loads Data Program. Also included in this report are descriptions and discussions of the methods employed in the acquisition and processing of the data. The C-141A Aircraft Flight Loads Data Program was a single project which incorporated four separate concepts: an Interim Flight Loads Program, a Ground Loads Study, a Lead-the-Force Flight Loads Program, and an Atmospheric Turbulence Study. A total of from 28 to 35 aircraft at four Air Force Bases were employed at various periods during this effort to obtain structural load history and atmospheric turbulence data. Eight aircraft were instrumented for the acquisition of ground load experience data. A total data sample of 12,430 flight hours of flight loads data, 2,786 hours of atmospheric turbulence data, and 174.5 hours of ground load experience data was acquired and reduced during this program and is presented in this report. The structural load history data presented in this report is presently being employed in fatigue evaluations of the C-141A aircraft by the C-141 System Program Office. (This Abstract is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with prior approval of the C-141 System Program Office.)



## TABLE OF CONTENTS

SECTION	PAGE
I INTRODUCTION . . . . .	1
1.1 OBJECTIVES . . . . .	1
1.1.1 Interim Flight Loads Program . . . . .	1
1.1.2 Ground Loads Study . . . . .	1
1.1.3 Lead-the-Force Flight Loads Program . . . . .	2
1.1.4 Atmospheric Turbulence Study . . . . .	2
1.2 PROGRAM SUMMARY. . . . .	2
1.3 DESCRIPTION OF THE AIRCRAFT . . . . .	4
II INSTRUMENTATION AND RECORDING SYSTEMS . . . . .	9
2.1 FLIGHT LOADS INSTRUMENTATION . . . . .	9
2.2 GROUND LOADS INSTRUMENTATION . . . . .	9
2.3 TURBULENCE INDICATOR SWITCH . . . . .	11
2.4 RECORDING SYSTEM . . . . .	11
III DATA PROCESSING TECHNIQUES AND CRITERIA . . . . .	13
3.1 DATA PROCESSING TECHNIQUES. . . . .	13
3.1.1 Editing Section . . . . .	13
3.1.2 Manual Data Reduction Section . . . . .	14
3.1.3 Semi-Automatic Data Reading Section. . . . .	14
3.1.4 Computer . . . . .	15
3.1.5 Quality Control . . . . .	15
3.2 FLIGHT LOADS CRITERIA . . . . .	15
3.2.1 Peak Criteria . . . . .	16
3.2.2 Flight Parameters . . . . .	16
3.2.3 Mission Parameters . . . . .	17
3.2.4 Derived Vertical Gust Velocity . . . . .	18
3.3 GROUND LOADS CRITERIA . . . . .	19
3.3.1 Peak Criteria . . . . .	19
3.3.2 Ground Operations Parameters . . . . .	19
3.3.3 Mission Parameters . . . . .	20
3.4 ATMOSPHERIC TURBULENCE CRITERIA . . . . .	20



## TABLE OF CONTENTS concluded

SECTION	PAGE
IV RESULTS . . . . .	22
4.1 INTERIM FLIGHT LOADS DATA . . . . .	26
4.2 LEAD-THE-FORCE FLIGHT LOADS DATA . . . . .	32
4.3 GROUNDS LOADS STUDY DATA . . . . .	33
4.4 ATMOSPHERIC TURBULENCE STUDY DATA . . . . .	35
4.5 DATA ACCURACY . . . . .	38
V CONCLUSIONS . . . . .	39
APPENDIX A INTERIM FLIGHT LOADS DATA . . . . .	41
APPENDIX B LEAD-THE-FORCE FLIGHT LOADS DATA . . . . .	125
APPENDIX C GROUND LOADS STUDY DATA . . . . .	199
APPENDIX D ATMOSPHERIC TURBULENCE STUDY DATA . . . . .	283
REFERENCES . . . . .	461



## ILLUSTRATIONS

FIGURE		PAGE
1	Photograph of C-141A Aircraft . . . . .	6
2	Schematic Drawing of C-141A Aircraft . . . . .	7
3	Schematic Illustrating Instrumentation and Recording System Locations . . . . .	10
A1	Positive Maneuver Spectrum Obtained from 6,354 Flight-Hours of Interim Flight Loads Data . . . . .	42
A2	Positive Gust Spectrum by Altitude Obtained from 6,354 Flight-Hours of Interim Flight Loads Data . . . . .	43
A3	Gust Spectrum by Altitude Obtained from 1,200 Flight- Hours of IFL Data Acquired at Charleston Air Force Base (Refer to Table A1) . . . . .	44
A4	Gust Spectrum by Altitude Obtained from 1,221 Flight- Hours of IFL Data Acquired at Dover Air Force Base (Refer to Table A2) . . . . .	46
A5	Gust Spectrum by Altitude Obtained from 1,792 Flight- Hours of IFL Data Acquired at Tinker Air Force Base (Refer to Table A3) . . . . .	48
A6	Gust Spectrum by Altitude Obtained from 2,141 Flight- Hours of IFL Data Acquired at Travis Air Force Base (Refer to Table A4) . . . . .	50
A7	Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Logistics Medium Range Missions . . . . .	54
A8	Percentages of the Total Flight Time Spent in the Various Altitude Bands for Logistics Medium Range Missions . . . . .	54
A9	Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Logistics Long Range Missions . . . . .	55



# ILLUSTRATIONS continued

FIGURE		PAGE
A10	Percentages of the Total Flight Time Spent in the Various Altitude Bands for Logistics Long Range Missions . . . . .	55
A11	Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Training Missions . . .	56
A12	Percentages of the Total Flight Time Spent in the Various Altitude Bands for Training Missions . . .	56
A13	Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Logistics Drop Short Range Missions . . . . .	57
A14	Percentages of the Total Flight Time Spent in the Various Altitude Bands for Logistics Drop Short Range Missions . . . . .	57
A15	Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Miscellaneous Missions .	58
A16	Percentages of the Total Flight Time Spent in the Various Altitude Bands for Miscellaneous Missions .	58
A17	Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Flight Test Missions . .	59
A18	Percentages of the Total Flight Time Spent in the Various Altitude Bands for Flight Test Missions . .	59
A19	Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Airborne Training Missions	60
A20	Percentages of the Total Flight Time Spent in the Various Altitude Bands for Airborne Training Missions	60
B1	Positive Maneuver Spectrum Obtained from 6,076 Flight-Hours of Lead-the-Force Flight Loads Data . . . .	126



# ILLUSTRATIONS continued

FIGURE	PAGE
B2 Positive Gust Spectrum by Altitude Obtained from 6,076 Flight-Hours of Lead-the-Force Flight Loads Data . . . . .	127
B3 Gust Spectrum by Altitude Obtained from 646 Flight-Hours of LTF Data Acquired at Charleston Air Force Base (Refer to Table B1) . . . . .	128
B4 Gust Spectrum by Altitude Obtained from 960 Flight-Hours of LTF Data Acquired at Dover Air Force Base (Refer to Table B2) . . . . .	130
B5 Gust Spectrum by Altitude Obtained from 1,949 Flight-Hours of LTF Data Acquired at Tinker Air Force Base (Refer to Table B3) . . . . .	132
B6 Gust Spectrum by Altitude Obtained from 2,521 Flight-Hours of LTF Data Acquired at Travis Air Force Base (Refer to Table B4) . . . . .	134
B7 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Logistics Medium Range Missions . . . . .	138
B8 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Logistics Medium Range Missions . . . . .	138
B9 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Logistics Long Range Missions . . . . .	139
B10 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Logistics Long Range Missions . . . . .	139
B11 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Training Missions . . . . .	140
B12 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Training Missions . . . . .	140



# ILLUSTRATIONS concluded

FIGURE		PAGE
B13	Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Miscellaneous Missions .	141
B14	Percentages of the Total Flight Time Spent in the Various Altitude Bands for Miscellaneous Missions .	141
B15	Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Flight Test Missions . .	142
B16	Percentages of the Total Flight Time Spent in the Various Altitude Bands for Flight Test Missions . . .	142
C1	Cumulative Frequency of Positive Incremental Ground Load Factor Peaks for the Mission Phases of Taxi, Take-off Run, Landing Roll-out, and Touch-and-Go Roll . . . . .	200
C2	Cumulative Frequency of Positive Incremental Ground Load Factor Peaks per Landing for the Landing Impact Mission Phase . . . . .	201
D1	Comparison of the Positive Derived Vertical Gust Velocity Spectra by Season for Altitudes Greater than 30,000 feet . . . . .	291
D2	Comparison of the Positive Derived Vertical Gust Velocity Spectra of Two Routes Encountered in the Atmospheric Turbulence Study . . . . .	292



## TABLES

TABLE	PAGE
1    Distribution of Instrumentation Installations . . . . .	4
2    C-141A Aircraft Design Criteria . . . . .	8
3    Distribution of Reducible Data Samples (Hours) by Air Force Base and Program Phase . . . . .	23
4    Distribution of Reduced Data Samples (Hours) by Air Force Base and Program Phase . . . . .	23
5    Comparison by Mission Type of the Percentage of the Number of Flights Flown with the Percentage of the Number of Flights in the Reduced Flight Loads Data Samples at Each Base . . .	25
6    Distribution of the Reduced Flight Loads Data Samples (Number and Hours) by Air Force Base and Mission . . .	28
7    Description of the Weight, Altitude, and Airspeed Band Codes	30
8    Description of the Load Factor and Derived Gust Velocity Bands . . . . .	31
9    Ground Loads Study Weight and Load Factor Band Descriptions . . . . .	34
10   Distribution of the Reduced Ground Loads Data Sample by Mission Phase . . . . .	33
11   List of Bases at Which Data was Acquired and Reduced for the Ground Loads Study . . . . .	36
12   Comparison of the Load Factor Two-Standard Deviation Errors with the Specified Limits . . . . .	38
A1   Distribution of Derived Vertical Gust Velocity by Altitude for the Charleston Air Force Base Data Sample . . . . .	52
A2   Distribution of Derived Vertical Gust Velocity by Altitude for the Dover Air Force Base Data Sample . . . . .	52
A3   Distribution of Derived Vertical Gust Velocity by Altitude for the Tinker Air Force Base Data Sample . . . . .	53



# TABLES continued

TABLE	PAGE
A4 Distribution of Derived Vertical Gust Velocity by Altitude for the Travis Air Force Base Data Sample . . . . .	53
A5 Distribution of Time (Hours) by Altitude and Airspeed Increments for the Logistics, Medium Range Mission . . .	61
A6 Distribution of Time (Hours) by Altitude and Airspeed Increments for the Logistics, Long Range Mission . . . .	61
A7 Distribution of Time (Hours) by Altitude and Airspeed Increments for the Training Mission . . . . .	61
A8 Distribution of Time (Hours) by Altitude and Airspeed Increments for the Logistics Drop, Short Range Mission . .	62
A9 Distribution of Time (Hours) by Altitude and Airspeed Increments for the Miscellaneous Mission . . . . .	62
A10 Distribution of Time (Hours) by Altitude and Airspeed Increments for the Flight Test Mission . . . . .	63
A11 Distribution of Time (Hours) by Altitude and Airspeed Increments for the Airborne Training Mission . . . . .	63
A12 Distribution of Maneuver Load Factors for the Charleston Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	64
A13 Distribution of Maneuver Load Factors for the Charleston Air Force Base Logistics, Long Range Mission Data Sample	66
A14 Distribution of Maneuver Load Factors for the Charleston Air Force Base Training Mission Data Sample . . . . .	67
A15 Distribution of Maneuver Load Factors for the Charleston Air Force Base Miscellaneous Mission Data Sample . . .	68
A16 Distribution of Maneuver Load Factors for the Charleston Air Force Base Flight Test Mission Data Sample . . . . .	69



# TABLES continued

TABLE		PAGE
A17	Distribution of Maneuver Load Factors for the Charleston Air Force Base Airborne Training Mission Data Sample . . . . .	69
A18	Distribution of Maneuver Load Factors for the Dover Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	70
A19	Distribution of Maneuver Load Factors for the Dover Air Force Base Training Mission Data Sample . . . . .	72
A20	Distribution of Maneuver Load Factors for the Dover Air Force Base Logistics Drop, Short Range Mission Data Sample . . . . .	73
A21	Distribution of Maneuver Load Factors for the Dover Air Force Base Miscellaneous Mission Data Sample . . . . .	74
A22	Distribution of Maneuver Load Factors for the Dover Air Force Base Flight Test Mission Data Sample . . . . .	74
A23	Distribution of Maneuver Load Factors for the Tinker Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	75
A24	Distribution of Maneuver Load Factors for the Tinker Air Force Base Training Mission Data Sample . . . . .	76
A25	Distribution of Maneuver Load Factors for the Tinker Air Force Base Flight Test Mission Data Sample . . . . .	78
A26	Distribution of Maneuver Load Factors for the Travis Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	79
A27	Distribution of Maneuver Load Factors for the Travis Air Force Base Logistics, Long Range Mission Data Sample . . . . .	81
A28	Distribution of Maneuver Load Factors for the Travis Air Force Base Training Mission Data Sample . . . . .	82



TABLES continued

TABLE		PAGE
A29	Distribution of Maneuver Load Factors for the Travis Air Force Base Flight Test Mission Data Sample . . . . .	83
A30	Distribution of Gust Load Factors for the Charleston Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	84
A31	Distribution of Gust Load Factors for the Charleston Air Force Base Logistics, Long Range Mission Data Sample . . . . .	86
A32	Distribution of Gust Load Factors for the Charleston Air Force Base Training Mission Data Sample . . . . .	87
A33	Distribution of Gust Load Factors for the Charleston Air Force Base Miscellaneous Mission Data Sample . . . . .	88
A34	Distribution of Gust Load Factors for the Charleston Air Force Base Flight Test Mission Data Sample . . . . .	89
A35	Distribution of Gust Load Factors for the Charleston Air Force Base Airborne Training Mission Data Sample . . . . .	89
A36	Distribution of Gust Load Factors for the Dover Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	90
A37	Distribution of Gust Load Factors for the Dover Air Force Base Training Mission Data Sample . . . . .	92
A38	Distribution of Gust Load Factors for the Dover Air Force Base Logistics Drop, Short Range Mission Data Sample . . . . .	93
A39	Distribution of Gust Load Factors for the Dover Air Force Base Miscellaneous Mission Data Sample . . . . .	94
A40	Distribution of Gust Load Factors for the Dover Air Force Base Flight Test Mission Data Sample . . . . .	94
A41	Distribution of Gust Load Factors for the Tinker Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	95



# TABLES continued

TABLE		PAGE
A42	Distribution of Gust Load Factors for the Tinker Air Force Base Training Mission Data Sample . . . . .	96
A43	Distribution of Gust Load Factors for the Tinker Air Force Base Flight Test Mission Data Sample . . . . .	98
A44	Distribution of Gust Load Factors for the Travis Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	99
A45	Distribution of Gust Load Factors for the Travis Air Force Base Logistics, Long Range Mission Data Sample .	101
A46	Distribution of Gust Load Factors for the Travis Air Force Base Training Mission Data Sample . . . . .	102
A47	Distribution of Gust Load Factors for the Travis Air Force Base Flight Test Mission Data Sample . . . . .	103
A48	Distribution of Derived Vertical Gust Velocity for the Charleston Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	104
A49	Distribution of Derived Vertical Gust Velocity for the Charleston Air Force Base Logistics, Long Range Mission Data Sample . . . . .	106
A50	Distribution of Derived Vertical Gust Velocity for the Charleston Air Force Base Training Mission Data Sample	107
A51	Distribution of Derived Vertical Gust Velocity for the Charleston Air Force Base Miscellaneous Mission Data Sample . . . . .	108
A52	Distribution of Derived Vertical Gust Velocity for the Charleston Air Force Base Flight Test Mission Data Sample . . . . .	109
A53	Distribution of Derived Vertical Gust Velocity for the Charleston Air Force Base Airborne Training Mission Data Sample . . . . .	109



# TABLES continued

TABLE	PAGE
A54 Distribution of Derived Vertical Gust Velocity for the Dover Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	110
A55 Distribution of Derived Vertical Gust Velocity for the Dover Air Force Base Training Mission Data Sample . .	112
A56 Distribution of Derived Vertical Gust Velocity for the Dover Air Force Base Logistics Drop, Short Range Mission Data Sample . . . . .	113
A57 Distribution of Derived Vertical Gust Velocity for the Dover Air Force Base Miscellaneous Mission Data Sample . . . . .	114
A58 Distribution of Derived Vertical Gust Velocity for the Dover Air Force Base Flight Test Mission Data Sample .	114
A59 Distribution of Derived Vertical Gust Velocity for the Tinker Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	115
A60 Distribution of Derived Vertical Gust Velocity for the Tinker Air Force Base Training Mission Data Sample . .	116
A61 Distribution of Derived Vertical Gust Velocity for the Tinker Air Force Base Flight Test Mission Data Sample .	118
A62 Distribution of Derived Vertical Gust Velocity for the Travis Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	119
A63 Distribution of Derived Vertical Gust Velocity for the Travis Air Force Base Logistics, Long Range Mission Data Sample . . . . .	121
A64 Distribution of Derived Vertical Gust Velocity for the Travis Air Force Base Training Mission Data Sample . .	122
A65 Distribution of Derived Vertical Gust Velocity for the Travis Air Force Base Flight Test Mission Data Sample .	123



**TABLES continued**

<b>TABLE</b>	<b>PAGE</b>
B1    Distribution of Derived Vertical Gust Velocity by Altitude for the Charleston Air Force Base Data Sample . . . . .	136
B2    Distribution of Derived Vertical Gust Velocity by Altitude for the Dover Air Force Base Data Sample . . .	136
B3    Distribution of Derived Vertical Gust Velocity by Altitude for the Tinker Air Force Base Data Sample . . .	137
B4    Distribution of Derived Vertical Gust Velocity by Altitude for the Travis Air Force Base Data Sample . . .	137
B5    Distribution of Time (Hours) by Altitude and Airspeed Increments for the Logistics, Medium Range Mission . . .	143
B6    Distribution of Time (Hours) by Altitude and Airspeed Increments for the Logistics, Long Range Mission . . .	143
B7    Distribution of Time (Hours) by Altitude and Airspeed Increments for the Training Mission . . . . .	143
B8    Distribution of Time (Hours) by Altitude and Airspeed Increments for the Miscellaneous Mission . . . . .	144
B9    Distribution of Time (Hours) by Altitude and Airspeed Increments for the Flight Test Mission . . . . .	144
B10   Distribution of Maneuver Load Factors for the Charleston Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	145
B11   Distribution of Maneuver Load Factors for the Charleston Air Force Base Training Mission Data Sample . . . . .	147
B12   Distribution of Maneuver Load Factors for the Charleston Air Force Base Miscellaneous Mission Data Sample . . .	148
B13   Distribution of Maneuver Load Factors for the Charleston Air Force Base Flight Test Mission Data Sample . . . . .	148



TABLES continued

TABLE	PAGE
B14    Distribution of Maneuver Load Factors for the Dover Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	149
B15    Distribution of Maneuver Load Factors for the Dover Air Force Base Logistics, Long Range Mission Data Sample . . . . .	151
B16    Distribution of Maneuver Load Factors for the Dover Air Force Base Training Mission Data Sample . . . . .	152
B17    Distribution of Maneuver Load Factors for the Dover Air Force Base Flight Test Mission Data Sample . . . . .	153
B18    Distribution of Maneuver Load Factors for the Tinker Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	154
B19    Distribution of Maneuver Load Factors for the Tinker Air Force Base Training Mission Data Sample . . . . .	155
B20    Distribution of Maneuver Load Factors for the Tinker Air Force Base Flight Test Mission Data Sample . . . . .	157
B21    Distribution of Maneuver Load Factors for the Travis Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	158
B22    Distribution of Maneuver Load Factors for the Travis Air Force Base Logistics, Long Range Mission Data Sample . . . . .	160
B23    Distribution of Maneuver Load Factors for the Travis Air Force Base Training Mission Data Sample . . . . .	161
B24    Distribution of Maneuver Load Factors for the Travis Air Force Base Flight Test Mission Data Sample . . . . .	162
B25    Distribution of Gust Load Factors for the Charleston Air Force Base Logistics, Medium Range Mission Data Sample	163



# TABLES continued

TABLE	PAGE
B26    Distribution of Gust Load Factors for the Charleston Air Force Base Training Mission Data Sample . . . . .	165
B27    Distribution of Gust Load Factors for the Charleston Air Force Base Miscellaneous Mission Data Sample . . . . .	166
B28    Distribution of Gust Load Factors for the Charleston Air Force Base Flight Test Mission Data Sample . . . . .	166
B29    Distribution of Gust Load Factors for the Dover Air Force Base Logistics, Medium Range Mission Data Sample . . .	167
B30    Distribution of Gust Load Factors for the Dover Air Force Base Logistics, Long Range Mission Data Sample . . .	169
B31    Distribution of Gust Load Factors for the Dover Air Force Base Training Mission Data Sample . . . . .	170
B32    Distribution of Gust Load Factors for the Dover Air Force Base Flight Test Mission Data Sample . . . . .	171
B33    Distribution of Gust Load Factors for the Tinker Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	172
B34    Distribution of Gust Load Factors for the Tinker Air Force Base Training Mission Data Sample . . . . .	173
B35    Distribution of Gust Load Factors for the Tinker Air Force Base Flight Test Mission Data Sample . . . . .	175
B36    Distribution of Gust Load Factors for the Travis Air Force Base Logistics, Medium Range Mission Data Sample	176
B37    Distribution of Gust Load Factors for the Travis Air Force Base Logistics, Long Range Mission Data Sample	178
B38    Distribution of Gust Load Factors for the Travis Air Force Base Training Mission Data Sample . . . . .	179



TABLES continued

TABLE		PAGE
B39	Distribution of Gust Load Factors for the Travis Air Force Base Flight Test Mission Data Sample . . . . .	180
B40	Distribution of Derived Vertical Gust Velocity for the Charleston Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	181
B41	Distribution of Derived Vertical Gust Velocity for the Charleston Air Force Base Training Mission Data Sample	183
B42	Distribution of Derived Vertical Gust Velocity for the Charleston Air Force Base Miscellaneous Mission Data Sample . . . . .	184
B43	Distribution of Derived Vertical Gust Velocity for the Charleston Air Force Base Flight Test Mission Data Sample . . . . .	184
B44	Distribution of Derived Vertical Gust Velocity for the Dover Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	185
B45	Distribution of Derived Vertical Gust Velocity for the Dover Air Force Base Logistics, Long Range Mission Data Sample . . . . .	187
B46	Distribution of Derived Vertical Gust Velocity for the Dover Air Force Base Training Mission Data Sample . .	188
B47	Distribution of Derived Vertical Gust Velocity for the Dover Air Force Base Flight Test Mission Data Sample	189
B48	Distribution of Derived Vertical Gust Velocity for the Tinker Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	190
B49	Distribution of Derived Vertical Gust Velocity for the Tinker Air Force Base Training Mission Data Sample	191
B50	Distribution of Derived Vertical Gust Velocity for the Tinker Air Force Base Flight Test Mission Data Sample	193



# TABLES continued

TABLE	PAGE
B51 Distribution of Derived Vertical Gust Velocity for the Travis Air Force Base Logistics, Medium Range Mission Data Sample . . . . .	194
B52 Distribution of Derived Vertical Gust Velocity for the Travis Air Force Base Logistics, Long Range Mission Data Sample . . . . .	196
B53 Distribution of Derived Vertical Gust Velocity for the Travis Air Force Base Training Mission Data Sample . . .	197
B54 Distribution of Derived Vertical Gust Velocity for the Travis Air Force Base Flight Test Mission Data Sample . .	198
C1 Distribution of Ground Load Factors for the Taxi Mission Phase . . . . .	202
C2 Distribution of Ground Load Factors for the Take-Off Run Mission Phase . . . . .	202
C3 Distribution of Ground Load Factors for the Landing Roll-Out Mission Phase . . . . .	203
C4 Distribution of Ground Load Factors for the Touch-and-Go Roll Mission Phase . . . . .	203
C5 Distribution of Ground Load Factors for the Landing Impact Mission Phase . . . . .	204
C6 Distribution of Ground Load Factors by Mission Phase for Aircraft Assigned to Dover Air Force Base, Delaware . .	205
C7 Distribution of Ground Load Factors by Mission Phase for Aircraft Assigned to Tinker Air Force Base, Oklahoma . .	207
C8 Distribution of Ground Load Factors by Mission Phase for Aircraft Assigned to Travis Air Force Base, California . .	209
C9 Distribution of Ground Load Factor. by Mission Phase for Data Acquired at Altus Air Force Base, Oklahoma. . . .	211



# TABLES continued

TABLE	PAGE
C10 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Amarillo Air Force Base/Municipal, Texas . . . . .	212
C11 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Anderson Air Base, Guam . . . . .	213
C12 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Andrews Air Force Base, Washington D. C.	214
C13 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Antigua, West Indies . . . . .	215
C14 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Ascension Islands, South Atlantic . . . .	216
C15 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Beale Air Force Base, California . . . .	217
C16 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Bien Hoa Air/Depot, Vietnam . . . . .	218
C17 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Cannon Air Force Base, New Mexico . . .	219
C18 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Carswell Air Force Base, Texas . . . .	220
C19 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Chambley Air Base, France . . . . .	221
C20 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Charleston Air Force Base/Municipal, South Carolina . . . . .	222
C21 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Clark Air Base, Philippines . . . . .	223
C22 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Classified . . . . .	224



# TABLES continued

TABLE	PAGE
C23 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Clinton-Sherman Air Force Base, Oklahoma . . . . .	225
C24 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Dallas Love Field, Texas . . . . .	226
C25 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Danang Air Base, Vietnam . . . . .	227
C26 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Dobbins Air Force Base/Naval Air Station, Georgia . . . . .	228
C27 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Don Muang Air Depot, Bangkok, Thailand	229
C28 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Dover Air Force Base, Delaware . . .	230
C29 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Edwards Air Force Base, California . .	232
C30 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Elmendorf Air Force Base, Alaska . .	233
C31 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Forbes Air Force Base, Kansas. . . .	234
C32 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Ft. Smith Municipal, Arkansas . . . .	235
C33 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Goose Bay, Labrador . . . . .	236
C34 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Greater Southwest International, Texas .	237
C35 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Hickam Air Force Base, Hawaii. . . .	238



# TABLES continued

TABLE	PAGE
C36 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Hill Air Force Base, Utah . . . . .	239
C37 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Hunter Air Force Base, Georgia . . . . .	240
C38 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Kadena Air Base, Okinawa . . . . .	241
C39 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Kelly Air Force Base, Texas . . . . .	242
C40 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Kimpo International Airport, Seoul, Korea	243
C41 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Kindley Air Force Base, Bermuda . . . . .	244
C42 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Lajes Air/Depot, Azores . . . . .	245
C43 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Lakehurst Naval Air Station, New Jersey	246
C44 Distribution of Ground Load Factors by Mission Phase for Data Acquired at March Air Force Base, California . . . . .	247
C45 Distribution of Ground Load Factors by Mission Phase for Data Acquired at McChord Air Force Base, Washington . . . . .	248
C46 Distribution of Ground Load Factors by Mission Phase for Data Acquired at McClellan Air Force Base, California . . . . .	249
C47 Distribution of Ground Load Factors by Mission Phase for Data Acquired at McConnell Air Force Base, Kansas . . . . .	250
C48 Distribution of Ground Load Factors by Mission Phase for Data Acquired at McCoy Air Force Base, Florida . . . . .	251
C49 Distribution of Ground Load Factors by Mission Phase for Data Acquired at McGuire Air Force Base, New Jersey . . . . .	252



TABLES continued

TABLE	PAGE
C50    Distribution of Ground Load Factors by Mission Phase for Data Acquired at Minneapolis-St. Paul International, Minnesota . . . . .	253
C51    Distribution of Ground Load Factors by Mission Phase for Data Acquired at New Orleans Naval Air Station, Louisiana . . . . .	254
C52    Distribution of Ground Load Factors by Mission Phase for Data Acquired at Niagara Falls Municipal, New York . . .	255
C53    Distribution of Ground Load Factors by Mission Phase for Data Acquired at North Island Naval Air Station, California	256
C54    Distribution of Ground Load Factors by Mission Phase for Data Acquired at Patrick Air Force Base, Florida. . . .	256
C55    Distribution of Ground Load Factors by Mission Phase for Data Acquired at Pittsburgh-Monroeville, Pennsylvania . .	257
C56    Distribution of Ground Load Factors by Mission Phase for Data Acquired at Pleiku Air/Depot, Vietnam . . . . .	258
C57    Distribution of Ground Load Factors by Mission Phase for Data Acquired at Point Mugu Naval Air Station, California	259
C58    Distribution of Ground Load Factors by Mission Phase for Data Acquired at Randolph Air Force Base, Texas. . . .	260
C59    Distribution of Ground Load Factors by Mission Phase for Data Acquired at Rhein Main Air/Depot, Germany. . . .	261
C60    Distribution of Ground Load Factors by Mission Phase for Data Acquired at Richards-Gebaur Air Force Base, Missouri . . . . .	262
C61    Distribution of Ground Load Factors by Mission Phase for Data Acquired at Robins Air Force Base, Georgia. . . .	263
C62    Distribution of Ground Load Factors by Mission Phase for Data Acquired at Saigon, Tan Son Nhut Air Depot, Vietnam	264



TABLES continued

TABLE	PAGE
C63 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Scott Air Force Base, Illinois . . . . .	265
C64 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Sheppard Air Force Base, Texas . . . . .	266
C65 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Tainan Air/Depot, Taiwan, Formosa . . . . .	267
C66 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Takhli Air/Depot, Thailand . . . . .	268
C67 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Tinker Air Force Base, Oklahoma . . . . .	269
C68 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Travis Air Force Base, California . . . . .	271
C69 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Tulsa International, Oklahoma . . . . .	273
C70 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Ubon Air/Depot, Thailand . . . . .	274
C71 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Wake Airport, Wake Island . . . . .	275
C72 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Wheelus Air Base, Libya . . . . .	276
C73 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Whiteman Air Force Base, Missouri . . . . .	276
C74 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Wilkes-Barre-Scranton, Pennsylvania . . . . .	277
C75 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Wright-Patterson Air Force Base, Ohio . . . . .	278
C76 Distribution of Ground Load Factors by Mission Phase for Data Acquired at Yokota Air Base, Japan . . . . .	279



# TABLES continued

TABLE		PAGE
C77	Distribution of Ground Load Factors by Mission Phase for Data Acquired at Youngstown Municipal, Ohio . . . . .	281
D1	List of Routes Over Which Atmospheric Turbulence Study Data was Acquired . . . . .	284
D2	Distributions of Derived Vertical Gust Velocity for All Routes Combined . . . . .	293
D3	Distributions of Derived Vertical Gust Velocity for the Route Between Tinker Air Force Base, Oklahoma and Travis Air Force Base, California . . . . .	302
D4	Distributions of Derived Vertical Gust Velocity for the Route Between Travis Air Force Base, California and Kelly Air Force Base, Texas . . . . .	305
D5	Distributions of Derived Vertical Gust Velocity for the Route Between Travis Air Force Base, California and Dover Air Force Base, Delaware . . . . .	309
D6	Distributions of Derived Vertical Gust Velocity for the Route Between Travis Air Force Base, California and Charleston Air Force Base/Municipal, South Carolina . . . . .	313
D7	Distributions of Derived Vertical Gust Velocity for the Route Between Travis Air Force Base, California and McGuire Air Force Base, New Jersey . . . . .	317
D8	Distributions of Derived Vertical Gust Velocity for the Route Between Travis Air Force Base, California and Hickam Air Force Base, Hawaii . . . . .	320
D9	Distributions of Derived Vertical Gust Velocity for the Route Between Travis Air Force Base, California and Wake Airport, Wake Island . . . . .	329
D10	Distributions of Derived Vertical Gust Velocity for the Route Between Travis Air Force Base, California and Yokota Air Base, Japan . . . . .	338



TABLES continued

TABLE	PAGE
D11 Distributions of Derived Vertical Gust Velocity for the Route Between Kelly Air Force Base, Texas and Elmendorf Air Force Base, Alaska . . . . .	345
D12 Distributions of Derived Vertical Gust Velocity for the Route Between Kelly Air Force Base, Texas and Dover Air Force Base, Delaware . . . . .	350
D13 Distributions of Derived Vertical Gust Velocity for the Route Between Elmendorf Air Force Base, Alaska and Dover Air Force Base, Delaware . . . . .	352
D14 Distributions of Derived Vertical Gust Velocity for the Route Between Elmendorf Air Force Base, Alaska and Charleston Air Force Base/Municipal, South Carolina . .	357
D15 Distributions of Derived Vertical Gust Velocity for the Route Between Elmendorf Air Force Base, Alaska and McGuire Air Force Base, New Jersey . . . . .	361
D16 Distributions of Derived Vertical Gust Velocity for the Route Between Elmendorf Air Force Base, Alaska and Laurence G. Hanscom Field, Massachusetts . . . . .	363
D17 Distributions of Derived Vertical Gust Velocity for the Route Between Elmendorf Air Force Base, Alaska and Yokota Air Base, Japan . . . . .	365
D18 Distributions of Derived Vertical Gust Velocity for the Route Between Dover Air Force Base, Delaware and Charleston Air Force Base/Municipal, South Carolina . .	372
D19 Distributions of Derived Vertical Gust Velocity for the Route Between Dover Air Force Base, Delaware and Chateauroux Air Base, France . . . . .	377
D20 Distributions of Derived Vertical Gust Velocity for the Route Between Charleston Air Force Base/Municipal and Torrejon De Ardoz Air Base, Spain . . . . .	379



# TABLES continued

TABLE	PAGE
D21 Distributions of Derived Vertical Gust Velocity for the Route Between McGuire Air Force Base, New Jersey and Rhein Main Air/Depot, Germany . . . . .	382
D22 Distributions of Derived Vertical Gust Velocity for the Route Between Hickam Air Force Base, Hawaii and Wake Airport, Wake Island . . . . .	387
D23 Distributions of Derived Vertical Gust Velocity for the Route Between Hickam Air Force Base, Hawaii and Clark Air Base, Philippines . . . . .	393
D24 Distributions of Derived Vertical Gust Velocity for the Route Between Hickam Air Force Base, Hawaii and Anderson Air Base, Guam . . . . .	399
D25 Distributions of Derived Vertical Gust Velocity for the Route Between Hickam Air Force Base, Hawaii and Yokota Air Base, Japan . . . . .	405
D26 Distributions of Derived Vertical Gust Velocity for the Route Between Wake Airport, Wake Island and Clark Air Base, Philippines . . . . .	408
D27 Distributions of Derived Vertical Gust Velocity for the Route Between Wake Airport, Wake Island and Saigon Tan Son Nhut Air/Depot, Vietnam . . . . .	416
D28 Distributions of Derived Vertical Gust Velocity for the Route Between Clark Air Base, Philippines and Anderson Air Base, Guam . . . . .	419
D29 Distributions of Derived Vertical Gust Velocity for the Route Between Clark Air Base, Philippines and Yokota Air Base, Japan . . . . .	424
D30 Distributions of Derived Vertical Gust Velocity for the Route Between Clark Air Base, Philippines and Saigon, Tan Son Nhut Air/Depot, Vietnam . . . . .	433



# TABLES concluded

TABLE		PAGE
D31	Distributions of Derived Vertical Gust Velocity for the Route Between Yokota Air Base, Japan and Saigon, Tan Son Nhut Air/Depot, Vietnam . . . . .	441
D32	Distributions of Derived Vertical Gust Velocity for the Route Between Kadena Air Base, Okinawa and Saigon, Tan Son Nhut Air/Depot, Vietnam . . . . .	449
D33	Distributions of Derived Vertical Gust Velocity for the Route Between Torrejon De Ardoz Air Base, Spain and Dhahran Air/Depot, Saudi Arabia . . . . .	454
D34	Distributions of Derived Vertical Gust Velocity for the Route Between Don Muang Air/Depot, Bangkok, Thailand and New Delhi/Palam Air/Depot, India . . . . .	457



## **SECTION I**

### **INTRODUCTION**

This is the final report for the C-141A Aircraft Flight Loads Data Program. Included in this report are descriptions of the various aspects and phases of the program and a presentation and discussion of the resulting data. The various aspects include: design, fabrication, and installation of the instrumentation and recording systems; the acquisition of data; and the reduction and analysis of C-141A aircraft structural load history and atmospheric turbulence data.

#### **1.1 OBJECTIVES**

The basic objective of the C-141A Aircraft Flight Loads Data Program was to obtain structural load history information for the C-141A force at an early date in the life of these aircraft and to investigate the atmospheric turbulence environment along worldwide Military Airlift Command, MAC, routes. This program was a single project which incorporated four separate phases: an Interim Flight Loads Program, a Ground Loads Study, a Lead-the-Force Flight Loads Program, and an Atmospheric Turbulence Study.

##### **1.1.1 Interim Flight Loads Program**

The Interim Flight Loads Program (IFL) was designed to obtain information used to determine cyclic loads and stresses applied to the aircraft structure during operational usage. This phase of the C-141A Flight Loads Data Program was conducted primarily to obtain data which would assist fatigue analysis personnel in the validation of the predicted flight loads spectra for the C-141A cyclic tests and in prediction of the structural service life expectancy of C-141A fleet aircraft. Further, these data may be used in the establishment of inspection and retrofit schedules, in aircraft rotation planning, and for technical guidance in the planning of new mission concepts.

##### **1.1.2 Ground Loads Study**

The C-141A aircraft Ground Loads Study (GLS) was designed to provide the Air Force with a sample of ground load experience data obtained during operational use of the C-141A aircraft. This information will be utilized for the verification of ground loads spectra employed in the aircraft fatigue analysis and cyclic test.



### 1.1.3 Lead-the-Force Flight Loads Program

The C-141A Lead-the-Force Program, sponsored by Headquarters Military Airlift Command, MAC, is utilizing six C-141A aircraft which are flying at an accelerated rate compared to the remainder of the C-141A fleet. The primary purpose of this program is the early authentication of logistic planning elements and the identification of problem areas before the remaining fleet experiences them. It will verify and validate the results of the functional simulator test efforts, investigate sonic fatigue, and expedite fixes and necessary modifications.

The Lead-the-Force phase of this flight loads program (LTF) was designed to acquire operational flight load history information on the LTF aircraft. This information was acquired for the purpose of determining if the LTF aircraft have experienced an operational load history similar to the remainder of the fleet but at an accelerated rate. This will be accomplished by correlating LTF data with IFL data.

### 1.1.4 Atmospheric Turbulence Study

The Atmospheric Turbulence Study, sponsored by Headquarters MAC Air Weather Service, was conducted as a companion effort with the Interim Flight Loads Program. This study was designed to obtain data which will contribute to the climatology of turbulence over MAC routes and also provide information which will enable meteorologists to study the association of turbulence with weather patterns. In general, this investigation was conducted to assist AWS in improving weather forecasting capabilities.

## 1.2 PROGRAM SUMMARY

The aircraft employed in the C-141A Aircraft Flight Loads Data Program were located at Charleston, Dover, Tinker and Travis Air Force Bases. A total of from 28 to 35 were utilized at various periods during this program to obtain flight load history data. Eight aircraft were employed for the acquisition of ground load experience data.

The primary instrumentation in those aircraft employed to obtain flight load history data was an oscillograph recording system, two pressure transducers, and an accelerometer mounted at the nominal center of gravity of the aircraft. These transducers were used to obtain time history measurements for the determination of airspeed (V), center of gravity normal load factor (G), and pressure altitude (H). The six LTF aircraft were instrumented for the acquisition of VGH data. From 22 to 29 additional C-141A aircraft



were employed for VGH data recording for the IFL phase of this program. In addition to the VGH instrumentation, all of the IFL aircraft, except those at Tinker Air Force Base, had turbulence indicator switches installed to provide a means for correlating the derived vertical gust velocity data with the atmospheric conditions encountered during flight.

The eight aircraft utilized to acquire ground load experience data, the GLS aircraft, were instrumented with an oscillograph recording system and an accelerometer to obtain a time history measurement of center of gravity load factor (G).

All of the aircraft employed in this program had additional electrical circuits installed for recording system control, to provide indications of the occurrence of various mission events, and for monitoring the performance of the recording system.

A total of 7,602 hours of VGH data was acquired on the Lead-the-Force aircraft over the data acquisition period. During this same period, 6,781 hours of VGH data was obtained in the Interim Flight Loads phase. Concurrently with the acquisition of IFL flight loads data, a total of 4,932 hours of Atmospheric Turbulence Study data was recorded. A total of 196.5 hours of ground load factor experience data was obtained in the Ground Loads Study.

Samples of 6,076 and 6,354 flight hours of VGH data were reduced and analyzed for the LTF and IFL efforts, respectively. A total of 4,561 hours of turbulence study data was reduced for the Atmospheric Turbulence Study. A total of 175 hours of ground load factor experience data was reduced and analyzed on the GLS phase of this program.

Work on the C-141A Aircraft Flight Loads Data Program contract was initiated by UDRI on the 19th of July 1965. Instrumentation installation for the IFL, Atmospheric Turbulence Study, and LTF recording efforts began in August of 1965 at Tinker and Travis Air Force Bases. By mid-September, 1965, the instrumentation of the aircraft at these bases was completed, and the recording effort was initiated. In mid-November instrumentation installation began at Charleston and Dover Air Force Bases for the IFL, turbulence study, and LTF phases of this program. Recording of data at these two bases began in January, 1966. The data acquisition efforts for the flight loads phases of this program were terminated on the 15th of September 1966. Thus, at Tinker and Travis Air Force Bases the duration of the flight loads data acquisition period was 12 months, while at Charleston and Dover Air Force Bases the duration was 8 months.

In February, 1966, the C-141 SPO initiated a request for the measurement of ground load factor experience data on eight C-141A aircraft.



Instrumentation in six of the IFL aircraft was modified and two additional aircraft were instrumented for the acquisition of ground loads data. The Ground Loads Study instrumentation installation began in late March, 1966 and was completed in mid-April at which time the recording of data began. The data acquisition requirements for the Ground Loads Study were completed by the 4th of August 1966. Thus the duration of the data acquisition period for the GLS phase of this program was 3 1/2 months.

The distribution of the instrumentation installations for the C-141A program by phase and Air Force Base is presented in Table 1.

TABLE 1  
Distribution of Instrumentation Installations

	Prior to April 1966		After April 1966		
	LTF	IFL*	LTF	IFL*	GLS
Charleston AFB	1	7	1	7	-
Dover AFB	1	8	1	7	4
Tinker AFB	2	6	2	4	2
Travis AFB	2	8	2	4	2
Totals	6	29	6	22	8

\* All of the IFL aircraft except those at Tinker Air Force Base had turbulence indicator switches installed for the AWS turbulence study.

The first phases of the overall data reduction effort were initiated in late September 1965. The final data tabulations were composited on 8 December 1966.

### 1.3 DESCRIPTION OF THE AIRCRAFT

The C-141A aircraft, manufactured by the Lockheed-Georgia Company, is a long-range, high-speed, high-altitude aircraft designed for use as a heavy logistic transport. This high sweptwing aircraft is designed to carry



various types of cargo as well as fully assembled missiles in the cargo compartment. It also has an aerial delivery system capability. The C-141A aircraft is powered by four Pratt and Whitney turbofan jet engines that are equipped with target-type thrust reverser doors which are used to assist in decelerating the aircraft on the ground. Aircraft deceleration, both in flight and on the ground, is augmented by upper and lower wing surface spoilers.

In Figure 1 is presented a photograph of a C-141A aircraft. A schematic drawing of the aircraft which includes some of the overall airframe dimensions is shown in Figure 2. In Table 2 is presented some of the design criteria for the C-141A aircraft. The maximum symmetrical flight maneuver load factor for this aircraft is 2.5g, 2.0g under 80 percent restrictions.



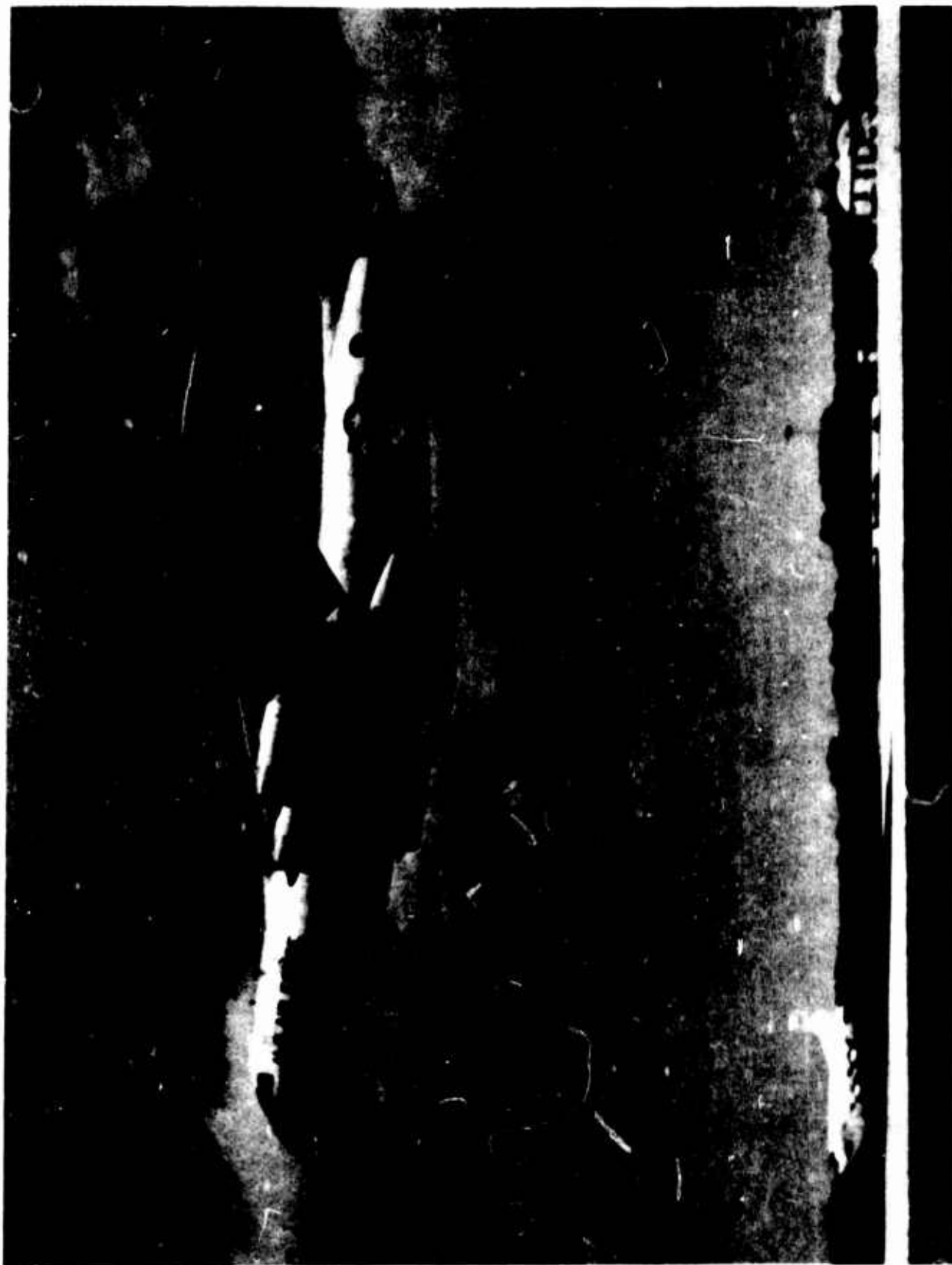
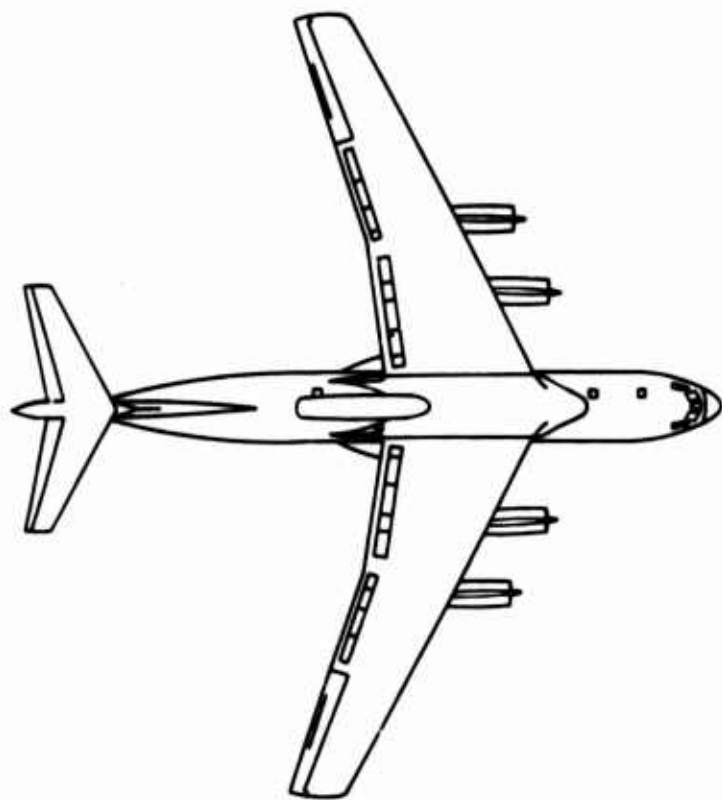


Figure 1. Photograph of C-141A Aircraft





WING AREA - 3228 FT<sup>2</sup>  
 WING SWEEP AT .25 CHORD - 25 DEGREES  
 MAC - 266.47 INCHES  
 ENGINES: FOUR P&W TF33-P-7, RATED  
 AT 21,000 LB. THRUST EACH

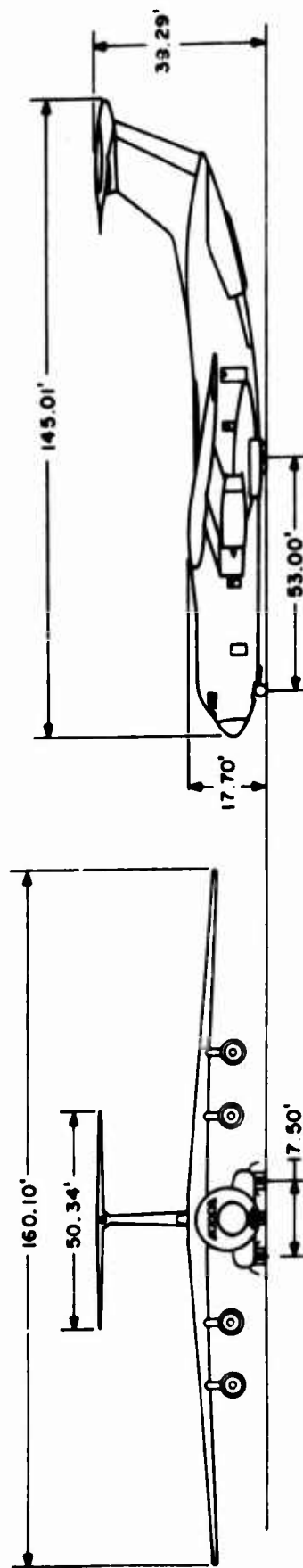


Figure 2. Schematic Drawing of C-141A Aircraft



**TABLE 2**  
**C-141A Aircraft Design Criteria**

**Design Weights**

Maximum Ramp Weight -----	318,000 lb.
Maximum Ramp Fuel Weight -----	150,020 lb.
Maximum Flight Weight -----	316,000 lb.
Maximum Flight Fuel Weight -----	148,120 lb.
Maximum Landing Weight -----	316,100 lb.
(6 ft. /sec. Sink Speed)	
Normal Landing Weight -----	257,000 lb.
(10 ft. /sec. Sink Speed)	
Maximum Zero Fuel Weight -----	204,620 lb.
Maximum Design Cargo Weight -----	70,000 lb.

**Design Speeds**

Limit -----	410 KCAS to 21,000 ft or M = .89
Maximum Level Flight -----	350 KCAS to 25,000 ft or M = .825
Rough Air Penetration Speed -----	270 KCAS to 36,800 ft or M = .825
Spoiler Placard - (Rough Air) ---	270 KCAS to 32,300 ft or M = .750
Spoiler Placard -----	350 KCAS to 19,800 ft or M = .750
Landing Gear Operation -----	200 KCAS to 24,200 ft or M = 0.480
Landing Gear Extended -----	235 KCAS to 23,200 ft or M = 0.550
T. O. Flap -----	200 KCAS to 24,200 ft or M = 0.480
Landing Flap -----	185 KCAS to 24,700 ft or M = 0.450

**Speeds Under 80% Placards**

Limit -----	410 KCAS to 21,000 ft or M = .890
Maximum Level Flight -----	290 KCAS to 33,700 ft or M = .825
Rough Air Penetration -----	225 KCAS to 44,500 ft or M = .825
Spoilers (Rough Air) -----	225 KCAS to 40,000 ft or M = .750
Spoilers -----	290 KCAS to 29,000 ft or M = .750
T. O. & Landing Flap -----	185 KCAS



## SECTION II

### INSTRUMENTATION AND RECORDING SYSTEMS

A complete and detailed description of the instrumentation and recording systems employed in this program is described in Reference 1. A brief discussion of the pertinent features of these systems is presented here in order to assist the reader in evaluating the resulting data. The instrumentation and recording system installation locations are schematically shown in Figure 3.

#### 2.1 FLIGHT LOADS INSTRUMENTATION

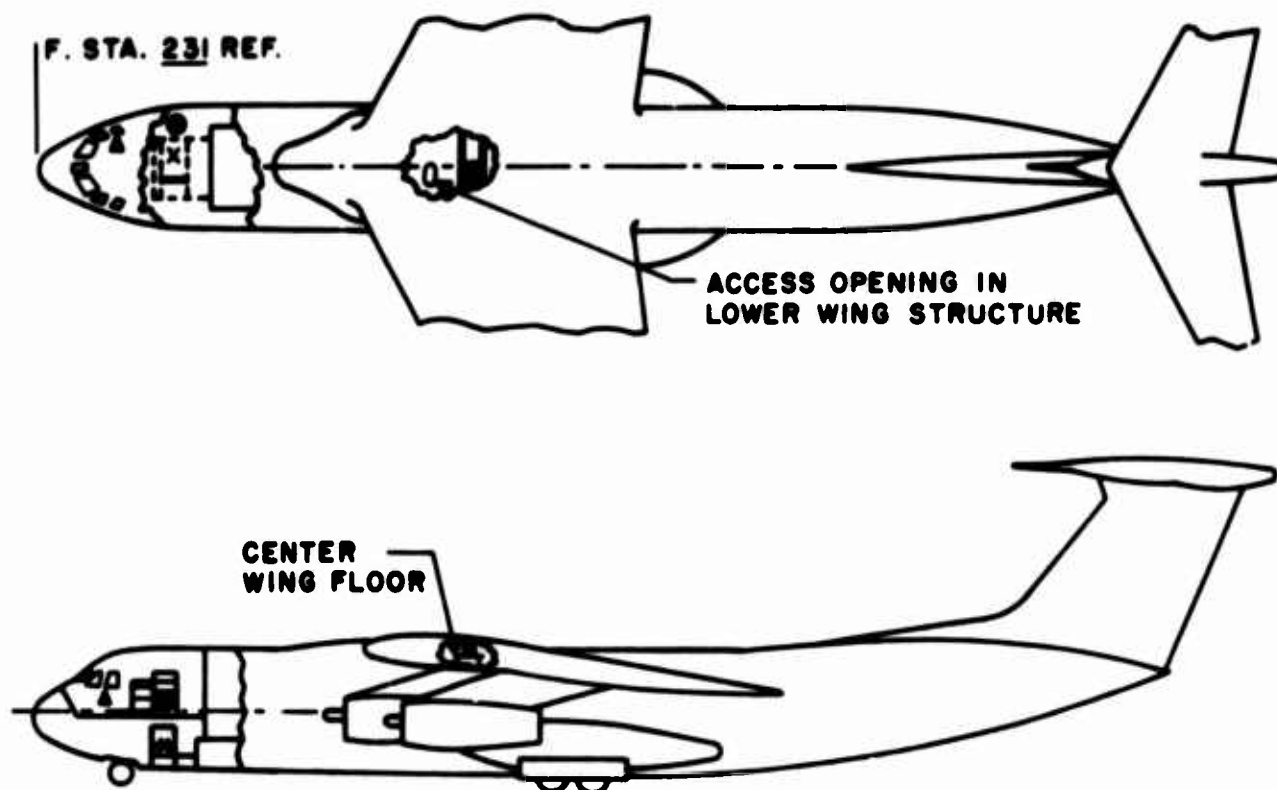
The VGH instrumentation and recording systems installed in the LTF and IFL aircraft were identical. To determine aircraft airspeed (V) and altitude (H), the dynamic and static pressure histories of each flight were recorded by use of a differential pressure transducer and an absolute pressure transducer, respectively. Both of these units were unbonded-strain-gage, diaphragm-type transducers which received pressure inputs from the co-pilot instrument pressure system. The differential pressure transducer yielded an electrical output proportional to the difference between the pitot and static pressures, i. e., the dynamic pressure, and the absolute pressure transducer yielded an electrical output proportional to the static pressure. The pressure transducers were mounted in the avionics compartment immediately aft of the FAA flight data recorder.

An accelerometer having a bonded strain-gage-type sensing element was employed to obtain a time history of normal load factor (G) at the nominal center of gravity of the aircraft. The accelerometer was installed near the fuselage centerline in the center wing box at Fuselage Station 925.

#### 2.2 GROUND LOADS INSTRUMENTATION

Each GLS aircraft was instrumented with an accelerometer at the nominal center of gravity of the aircraft. The accelerometer was employed to obtain a time history of normal load factor during taxi, take-off, and landing of the aircraft. The accelerometers employed in the GLS phase were of the same type and installed in the same manner as those used in the acquisition of VGH data. The response characteristics of these accelerometers were sufficient to accurately record load factor data at all frequencies encountered during aircraft ground operations as well as during flight.





INSTRUMENT DESIGNATION	APPROXIMATE FUSELAGE STATION
■ ACCELEROMETER	925
X AIRSPEED AND ALTITUDE TRANSDUCERS	410
▲ TURBULENCE INDICATOR SWITCH	300
— RECORDER	410
● VGH CIRCUIT BREAKER	406

Figure 3. Schematic Illustrating Instrumentation and Recording System Locations



In order to assist in the interpretation and reduction of the GLS data, the position of one of the aircraft touch-down relays and the output of one of the anti-skid detectors were recorded. The data from the anti-skid detector provided a continuous history of aircraft ground speed which was monitored to determine the times at which the aircraft was standing still, taxiing, or taking-off. For this program, those durations during which the ground speed was less than 20 knots were defined as the Taxi mission phase. The position of the aircraft touch-down relay was monitored to facilitate the determination of the time of lift-off or touch-down during data reduction.

### 2.3 TURBULENCE INDICATOR SWITCH

In order to accomplish the objectives of the AWS Atmospheric Turbulence Study, turbulence indicator switches were installed on the co-pilots side console in those aircraft instrumented for the Interim Flight Loads Program at Charleston, Dover, and Travis Air Force Bases. This switch provided for an electrical signal, which identified the switch position, to be recorded. The VGH data acquired was thus identified by the position of the switch (Storm or Non-Storm) which indicated the nature of turbulence being encountered. The switch was monitored during flight by the aircraft co-pilot according to criteria established by MAC Air Weather Service. These criteria are discussed in Section 3.4

### 2.4 RECORDING SYSTEM

The recording systems employed throughout the course of this program were comprised of three-channel bridge balance units and oscillograph recorders.

The functions of the bridge balance units were to provide a means for: adjusting input voltage and balancing the various bridge circuits; obtaining resistance calibration; obtaining event indications; and for providing power for the recorder and the various electrical bridges.

Century Electronics, Inc. Model 409H, oscillograph recorders were employed in this program. This recorder is a fourteen-channel instrument which utilizes light beam galva. meters to record on 3-5/8-inch-wide photo-sensitive paper film. The recorders employed in the VGH phases of this program were operated at a film speed of 6 inches per minute. A film speed of 24 inches per minute was used for the Ground Loads Study phase of this effort. The higher film speed was employed for the GLS phase to facilitate the visual resolution of the higher frequency load factor data encountered during aircraft ground operations.



The drive systems of the oscillograph recorders employed in the IFL and LTF programs were actuated by one of the aircraft's touch-down relays. Thus, data was acquired from lift-off to touch-down. The recorders used in the GLS phase were actuated by relays of the pressure door and landing gear position indicator circuits. The recorder operated from closing of pressure doors until the main landing gear was retracted and locked. During training missions, the entire touch-and-go segment of the mission was conducted with the landing gear extended. To conserve oscillograph film at Tinker AFB where a majority of the flights were training missions, a manual switch to turn on and off the recorder was installed on the flight engineer's console.

In all aircraft the recording system was mounted in the avionics compartment on the center equipment rack aft of the FAA flight data recorder.

Both 100-foot and 400-foot oscillograph magazines were employed during this effort. At a film speed of 6 inches per minute the 100-foot magazines, utilizing 150-foot rolls of thin base oscillograph paper, provided a continuous recording capability of approximately 5 hours. At this film speed the 400-foot magazines provided approximately 13 hours of continuous recording capability.



## SECTION III

### DATA PROCESSING TECHNIQUES AND CRITERIA

This C-141A flight loads program required the reduction of the recorded data into frequency distributions of peak normal load factor,  $N_z$ , and peak derived vertical gust velocity,  $U_{dg}$ . It was required that these data be coded in such a manner that they could be sorted and presented by any combination of a number of flight or mission parameters.

#### 3.1 DATA PROCESSING TECHNIQUES

The data reduction system employed for this program was one which has been developed and proven by the University of Dayton Research Institute over the course of many years on a number of similar flight loads programs. This system utilizes an editing section, a manual data reduction section, a semi-automatic data reading section, a digital computer, and a quality control section. The overall objective of the manual and semi-automatic efforts was the preparation of the data into the form in which it was automatically reduced and analyzed. The actual reduction, classification, sorting, and storage of the data was accomplished by the computer.

##### 3.1.1 Editing Section

The function of the data editing section was to monitor the quality of the instrumentation systems, evaluate the quality and completeness of the raw data, scan all oscillograph records for evidence of unusual flight conditions or of the effects of changes in aircraft utilization, and to specify which portions of the data were to be processed.

All oscillograph records were first reviewed to insure that the instrumentation system was functioning properly and that the traces were of the proper intensity and sensitivity for data reduction. If a need for instrumentation corrective action was suspected, the necessary data was immediately supplied to the instrumentation engineers.

After the quality of the oscillograph data was assured and the completeness of the supplementary data was checked the general nature of the flight was evaluated and the presence of unusual occurrences were noted and recorded. This supplementary data, generated on various forms by the flight crew and UDRI field representatives, included the fuel utilization history, a brief description of the mission, and identification of the instrumentation employed. The final stage in the editing of the data was to establish which portions of the recorded data were to be processed.



### 3.1.2 Manual Data Reduction Section

The functions of the manual data reduction section were: to prepare the oscillograph data for semi-automatic reading; to prepare the data for computation; and to check the results of both of these efforts.

The initial preparation of the oscillograph chart included a number of manual operations prior to the digitizing of the data. The mean position of the normal load factor trace was established throughout the oscillograph record, and load factor peaks were marked. The times at which the aircraft changed from one mission phase to another and the times at which the turbulence switch position changed were recorded. All of the above operations were checked independently by a data processing technician other than the technician who initially performed the operation.

During the second phase of the manual data reduction operation, the data reduction control information was assembled and transcribed onto punched cards. This control information included calibration data, aircraft weight and fuel expenditure information, historical parameters as a function of time, and other control information. This information was merged and tabulated with the digitized time history data for the flight. The tabulated data was checked against the raw data for completeness, accuracy, and proper format.

Following computation and reduction of the data in an IBM 7094 computer, the reduced data in the form of computer output tabs were returned to the manual data reduction section for final inspection. The purpose of this inspection was to locate any errors in format which might have occurred, to check unusual trends, to verify the magnitudes and distributions of the parameters, and to compare the computed airspeed, altitude, and weight histories with the flight log data. All acceptable and approved data was then permanently stored on magnetic tape.

### 3.1.3 Semi-Automatic Data Reading Section

The oscillograph records were read and digitized using Benson Lehner OSCAR's equipped with an IBM 024 keypunch. The OSCAR was utilized to measure the displacement of an oscillograph trace from a reference line. In reading the data, the machine operator manually aligns two hair lines on the point to be measured and presses a button. The machine then automatically digitizes the displacement value and punches the value into a card. The operator also used the keypunch to punch identifying information into the cards for use in computing and sorting. For this C-141A flight loads program, the OSCAR's were set to read the oscillograph trace displacements to a resolution of 1/200 inch.



#### 3.1.4 Computer

The IBM 7094 electronic digital computer, located at Wright-Patterson Air Force Base, was used on this program for the reduction, analysis, and compilation of the data. In addition to performing the specified calculations and coding of the data, the computer programs provided for checks of the data by comparing computer values with the normal operating ranges and the performance limitations of the C-141A aircraft. Values or combinations of parameters such as gross weight, altitude, and Mach number which were near the limits or exceeded the normal operating range of the aircraft were noted on the computer output. This data was manually checked to insure accuracy. High or low values of load factor or derived vertical gust velocity also were noted and later were compared manually with the oscillograph trace.

#### 3.1.5 Quality Control

In the interpretation and processing of the data from the oscillograph traces, significant errors can be introduced at three stages: during measurement of pre-flight calibration data, during establishment of the position of the 1.0 g mean line throughout the record, and during the digitizing of the load factor trace. The first two of these operations were accomplished manually and then were independently checked and verified. Thus, errors introduced during these operations were within an individual's capability to read a scale accurately.

The third major source of error was in the reading and digitizing of the oscillograph data on the Benson-Lehner OSCAR's. In order to maintain these reading errors within acceptable limits, statistically determined samples of the data were selected for checking, and the mean and standard deviation of the errors was determined. If either the mean or the standard deviation of the reading errors for a given sample exceeded specified limits, the flight record was returned to be reread. Before a record was reread, an explanation of the reason for rejection was also given to the reader who had read the record initially. The quality control section maintained a continuous record of the progress of each OSCAR operator in order to monitor his performance and accuracy.

#### 3.2 FLIGHT LOADS CRITERIA

The data reduction and analysis techniques employed in the Interim Flight Loads and Lead-the-Force Flight Loads phases of this program were identical. These techniques are discussed in this section.



### 3.2.1 Peak Criteria

The aircraft nominal center of gravity load factor history was reduced into peak count form. A peak was defined as the maximum excursion of the load factor trace between successive trace crossings of either of the threshold limits. Peak values of load factor within the threshold interval were considered to be insignificant and were not to be reduced. The threshold interval for those peaks which were the result of loads induced by atmospheric turbulence was  $0.9 < N_z < 1.1$ . The threshold interval for load factor peaks resulting from pilot induced, maneuver, loads was  $0.8 < N_z < 1.2$ .

The load factor peaks caused by atmospheric gusts were identified by the following criteria:

- (a) airspeed trace was rough,
- (b) load factor trace was rough, and peaks were sharp and irregular
- (c) peak exhibited a rapid rise and exponential decay, and
- (d) duration of peak was less than two seconds.

A load factor peak was identified as a maneuver peak when the peak:

- (a) did not meet gust peak criteria,
- (b) exhibited smooth, long-duration shape,
- (c) corresponded with a change in altitude or airspeed, and
- (d) duration exceeded two seconds.

### 3.2.2 Flight Parameters

Each reduced load factor peak and the corresponding discrete value of derived vertical gust velocity was categorized by data block and mission phase. A data block is a flight condition defined by the combination of one class interval each of gross weight (W), pressure altitude (H), and equivalent airspeed (A). The time and air distance traveled during each data block was also computed and coded. Pressure altitude and equivalent airspeed were calculated utilizing the dynamic and static pressure trace readings taken at sufficiently short time intervals to reasonably satisfy the assumption of constant airspeed and altitude over the interval.

The aircraft gross weight was determined at the same times as altitude and airspeed. The gross weight was calculated utilizing initial aircraft weight data and actual fuel expenditure information obtained from logs prepared by the flight engineers during each flight. The time durations between gross weight determinations were sufficiently short to insure that weight changes during the interval were small.



The mission phases used to segment the various aspects of each flight were:

- (1) First Climb
- (2) Second Climb
- (3) First Cruise
- (4) Second Cruise
- (5) First Descent
- (6) Second Descent
- (7) Low Level - Prior to Air Drop
- (8) Low Level - Subsequent to Air Drop
- (9) Air Drop

The Second Climb, Second Cruise, and Second Descent mission phases applied to the climb, cruise, and descent segments which followed the air drop phase of a logistics drop mission. Low level as applied to mission phases (7) and (8) referred to altitudes of 1,500 feet and below.

### 3.2.3 Mission Parameters

The mission parameters by which the reduced data distributions were coded are listed below.

- (a) Aircraft tail number
- (b) Date of flight
- (c) Season of the year:
  - (1) Winter - December through February
  - (2) Spring - March through May
  - (3) Summer - June through August
  - (4) Fall - September through November
- (d) Air Force Base (Base to which aircraft was assigned):
  - (1) Tinker Air Force Base, Oklahoma
  - (2) Travis Air Force Base, California
  - (3) Dover Air Force Base, Delaware
  - (4) Charleston Air Force Base, South Carolina
- (e) Route Flown
- (f) Type of Mission:
  - (1) Logistics, Medium Range
  - (2) Logistics, Long Range
  - (3) Training
  - (4) Logistics Drop, Short Range
  - (5) Miscellaneous Air Drop
  - (6) Flight Test
  - (7) Airborne Training



The coding of the reduced data sample by route flown was accomplished using major route segments. For example, a flight from Travis Air Force Base to Wake Island which stopped at Hickam Air Force Base would constitute two major route segments: Travis to Hickam and Hickam to Wake. The data acquired over each segment was identified by the route flown code for that segment.

The profiles of the types of mission listed above correspond to mission profiles employed by Lockheed-Georgia Company in fatigue analyses of the C-141A aircraft (See Reference 2). A total of eleven mission profiles were utilized in the fatigue analyses and were coded for data reduction. However, the seven types of mission listed above were the only ones encountered during this effort. The determination of the type of mission for each recorded flight was based upon the comparison of each flight's mission profile with those presented in Reference 2.

The data samples to be reduced and analyzed were selected from the recorded data sample in order to provide a representative sample of service usage, particularly with respect to mission mix. Insofar as was practical, the amount of reduced data for each month of the year was equal.

#### 3.2.4 Derived Vertical Gust Velocity

The derivation of the equation for derived vertical gust velocity,  $U_{de}$ , in terms of various aircraft flight and performance parameters, aircraft geometry, and gust factor is presented in Reference 3. This equation is also presented in Reference 4. The form of the  $U_{de}$  equation employed after substitution of the C-141A aircraft geometric constants, substitution of the subsonic gust factor, and upon rearrangement was

$$U_{de} = \frac{\Delta n}{V_t} \left[ 4279.138 \sqrt{\sigma} + 0.0051698 \frac{W}{m \sqrt{\sigma}} \right],$$

where

$U_{de}$  = derived vertical gust velocity, ft/sec,

$V_t$  = true airspeed, ft/sec,

$W$  = aircraft gross weight, lb,

$\sigma$  = ratio of local air density to standard or sea level air density,

$\Delta n$  = incremental normal load factor, g's, and

$m$  = slope of lift curve, per degree.

The slope-of-the-lift curve data employed in this program was based on the clean configuration of the C-141A aircraft. This data was obtained



as a function of Mach number from data generated by the Lockheed-Georgia Company. The slope-of-the-lift curve for 35 percent flaps is as much as 15% greater than that for the clean configuration. However, since the flap and spoiler positions were not recorded, the University was directed to use the clean configuration lift data throughout this effort.

### 3.3 GROUND LOADS CRITERIA

The data reduction and analysis techniques employed in the Ground Loads Study phase of the C-141A aircraft Flight Loads Data Program are presented in this section.

#### 3.3.1 Peak Criteria

The aircraft center of gravity normal load factor history during ground operations was reduced into peak count form. A peak was defined as the maximum excursion of the load factor trace between successive trace crossing of either threshold limit. This is the same peak criteria which was used for the IFL and LTF phases of this program. Peak values of load factor within the threshold interval,  $0.95 < N_z < 1.05$ , were considered to be insignificant and were not to be reduced.

No attempt was made in the GLS phase to classify load factor peaks in terms of gust, maneuver, or runway roughness. All peaks were classified as ground loads data.

#### 3.3.2 Ground Operations Parameters

Each reduced ground operations load factor peak and the associated time data was categorized by data block and mission phase.

A GLS data block is a ground operation condition defined by a class interval of cargo weight and a class interval of fuel weight. The cargo and fuel weight histories for each flight were determined from initial aircraft weight information and from actual fuel expenditure data obtained from logs prepared by the flight engineers during each flight. Only data recorded while the aircraft was in motion on the ground was included in the GLS data sample.

The mission phases utilized to segment the different aspects of the ground experience of each aircraft were:

- (1) Taxi,
- (2) Take-off Run,
- (3) Landing Roll-out,
- (4) Touch-and-Go Roll, and
- (5) Landing Impact.



The Landing Impact mission phase included both full stop and touch-and-go landings. The duration of this segment was defined as the first three seconds following initial runway contact by the landing gear.

The duration of the Landing Roll-out mission phase was defined as the period of time from the end of the Landing Impact mission phase until the time at which the aircraft's ground speed decelerated to 20 knots. The end of the Touch-and-Go Roll mission phase was defined as the time of lift-off.

### 3.3.3 Mission Parameters

The mission parameters by which the reduced ground loads data were coded included all of those listed in Section 3.2.3. In addition, the ground loads data were identified by the Air Force Base or air terminal at which the data was acquired.

## 3.4 ATMOSPHERIC TURBULENCE CRITERIA

The turbulence indicator switch (refer to Section 2.2) provided the means by which the recorded data was identified as having been obtained under either storm or non-storm conditions. The turbulence indicator switch was monitored by the aircraft co-pilot, and he used his best judgment to determine the proper position of the switch, i. e. , Storm or Non-Storm.

All data acquired when the aircraft was in the immediate vicinity of convective activity was identified as having been obtained under storm conditions. Convective activity included cumuliform cloud structures (non-stratus), thunderstorms, squalls, hail, tornadoes, etc. An aircraft was considered in the "immediate vicinity" of a storm when it was within a 25-mile horizontal and a 5,000-foot vertical distance from a storm. Data acquired at altitudes below 15,000 feet was not pertinent to the Air Weather Service studies. This data, by AWS direction, was classified as Storm data. For all other conditions not specified above including flight in clear air, stratus clouds, haze, and cirrus clouds, the data was identified as having been acquired under non-storm conditions.

Insofar as data reduction was concerned, the turbulence study condition (storm or non-storm) was an additional flight parameter by which the appropriate Interim Flight Loads  $U_{d_0}$  distributions were coded.

CAUTION - Because of the storm and non-storm criteria employed for this study, this data should not be used for structural calculations. The use of the terms storm condition and non-storm condition in the Atmospheric Turbulence Study were utilized for the sake of brevity and, unfortunately,



may be misleading. The data for this study was coded with regard to the existence or non-existence of atmospheric convective activity in the vicinity of the aircraft at the time at which the data was recorded. The data was coded in this fashion for meteorological studies, and the definitions of the storm and non-storm conditions differ from those normally employed in the generation of gust input spectra used for aircraft structural design and analysis. Thus, it is recommended that the Atmospheric Turbulence Study Data not be used for structural calculations.



## SECTION IV

### RESULTS

During the data acquisition phase of this program a total of 7,602 hours of reducible VGH data was acquired on the C-141A Lead-the-Force aircraft. This sample represents approximately 80 percent of the flight time logged by the LTF aircraft during this period. A reducible VGH data sample of 6,781 flight hours was collected on C-141A aircraft instrumented for the Interim Flight Loads phase. Concurrently with the collection of the IFL data sample, 4,932 hours of usable data was acquired for the Atmospheric Turbulence Study phase of this effort. About 98 percent of all the flight loads data recorded during this effort was reducible.

The reducible data yield for the Ground Loads Study was 196.5 hours of ground load experience data. This sample represents 99 percent of all of the ground loads history data collected during the 3 1/2 month GLS data acquisition period. In Table 3 are presented the distributions by Air Force Base and program phase of the recorded reducible data samples acquired during this program.

Of this usable data, a total sample of 12,430 hours of flight loads data was completely reduced into peak count distributions of center of gravity normal load factor and derived vertical gust velocity. This sample includes 6,076 hours of VGH data acquired on the C-141A Lead-the-Force aircraft, and 6,354 hours of VGH data obtained from those C-141A aircraft employed in the Interim Flight Loads phase. Concurrently with the reduction and compilation of the IFL data, 4,562 hours of the IFL derived vertical gust velocity data was coded by atmospheric condition and sorted for the Atmospheric Turbulence Study. For the GLS effort a sample of 174.5 hours of ground load experience data was completely reduced into peak count distributions of ground load factor. The distributions of these reduced data samples is presented in Table 4 by Air Force Base and program phase.

To justify the use of the VGH data acquired during the Interim Flight Loads phase of this program in fatigue analyses of the C-141A airframe, the reduced data must be representative of the total C-141A fleet load history. The load history of a fleet of aircraft depends upon the manner in which the aircraft are utilized and upon the environment in which the aircraft are flown. A study was conducted to determine whether or not the flights included in the reduced data sample would be representative of the usage and the environment experienced by the entire fleet.

Not all of the aircraft in the fleet were instrumented. Early in the program approximately seventy percent of the fleet was instrumented, but as new aircraft were delivered during the course of the program, the ratio of



**TABLE 3**

**Distribution of Recorded Data Samples (Hours)  
by Air Force Base and Program Phase**

<b>Air Force Base Program Phase</b>	<b>Charleston</b>	<b>Dover</b>	<b>Tinker</b>	<b>Travis</b>	<b>Totals</b>
<b>Interim Flight Loads</b>	1,295	1,362	1,849	2,275	6,781
<b>Lead-the-Force Flight Loads</b>	742	1,103	2,537	3,220	7,602
<b>Ground Loads Study</b>	----	95.0	69.5	32.0	196.5
<b>Atmospheric Turbulence Study</b>	1,295	1,362	----	2,275	4,932

**TABLE 4**

**Distribution of Reduced Data Samples (Hours)  
by Air Force Base and Program Phase**

<b>Air Force Base Program Phase</b>	<b>Charleston</b>	<b>Dover</b>	<b>Tinker</b>	<b>Travis</b>	<b>Totals</b>
<b>Interim Flight Loads</b>	1,200	1,221	1,792	2,141	6,354
<b>Lead-the-Force Flight Loads</b>	646	960	1,949	2,521	6,076
<b>Ground Loads Study</b>	-----	84.5	69.5	32.0	174.5
<b>Atmospheric Turbulence Study</b>	1,200	1,221	-----	2,141	4,562



instrumented aircraft to the total fleet dropped to about twenty-five percent. However, since a large number of aircraft were instrumented, it was assumed that the instrumented fleet usage was representative of the total fleet usage.

Not every flight of the instrumented aircraft was recorded; however, historical flight information records were maintained for each flight of every instrumented aircraft during the entire recording period. Therefore, a complete record was kept of the activities of the instrumented aircraft in addition to that portion of the instrumented fleet's activity represented by the reduced data sample.

The degree to which the reduced Interim Flight Loads data sample reflected fleet usage was determined by comparing the mission mix of all flights of the IFL instrumented aircraft at each base with the mission mix at each base in the reduced IFL data sample. The results of this comparison is presented in Table 5, which indicates that the reduced IFL data sample is in general quite representative of the C-141A aircraft fleet usage during the data acquisition period. At all of the bases except Dover Air Force Base the percentage of the flights flown for a given type of mission differs by less than five percent from the corresponding percentage in the reduced data. At Dover Air Force Base the percentages of the total number of flights of training and logistics missions for which data was reduced are approximately 10 percent greater and less, respectively, than the percentages flown.

The determination of the similarity of environment experienced by the fleet as compared to that experienced by the Interim Flight Loads aircraft was beyond the scope of this program. Data are available to make this evaluation if the Air Force should decide to do so. The atmospheric turbulence is a function of geographical area, season, and climatological parameters. Inasmuch as the data in the reduced data sample were acquired over a 12-month period, and since the month by month IFL samples were appropriately selected to reflect fleet activity, it is believed that the effects of season and climate are adequately represented in the data sample. Further, since no scheduling preference was given to instrumented aircraft, there is no reason to believe that the average environment encountered by the instrumented aircraft is different from that experienced by the fleet.

From this analysis, it was concluded that the Interim Flight Loads reduced data sample does adequately represent the service load experience of the C-141A fleet in terms of mission mix and of flight environment.

The reduced Lead-the-Force data sample was acquired during approximately sixty percent of the total mission time of the LTF aircraft during the data acquisition period. Historical flight information records were maintained, however, for each flight of every LTF aircraft during the entire recording period. A comparison was made of the mission mix of all flights



TABLE 5

Comparison by Mission Type of the Percentage of the  
Number of Flights Flown with the Percentage of the Number  
of Flights in the Reduced Flight Loads Data Samples at Each Base

	Charleston AFB		Dover AFB		Tinker AFB		Travis AFB		Totals	
	Flown	Reduced	Flown	Reduced	Flown	Reduced	Flown	Reduced	Flown	Reduced
<u>LEAD - THE - FORCE</u>										
Logistics	94.0	94.2	83.8	73.6	5.9	4.6	87.1	87.3	59.1	54.8
Training	3.3	2.9	14.6	23.8	91.9	94.8	11.7	11.9	39.1	44.0
Flight Test	1.6	1.0	1.6	2.6	2.2	0.6	0.8	0.8	1.5	1.0
Air Drop	1.1	1.9	-----	-----	-----	-----	-----	-----	0.1	0.2
Airborne Training	---	----	-----	-----	-----	-----	0.4	0.0	0.2	0.0
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<u>INTERIM FLIGHT LOADS</u>										
Logistics	68.9	70.9	72.1	62.4	6.3	4.3	75.0	72.0	56.5	48.4
Training	22.7	23.6	25.9	34.3	92.0	95.3	23.2	27.8	40.1	49.7
Flight Test	3.9	0.7	0.3	0.4	1.6	0.4	0.2	0.2	1.4	0.4
Air Drop	4.4	4.4	1.4	2.9	0.1	0.0	0.3	0.0	1.5	1.4
Airborne Training	0.1	0.4	0.3	0.0	---	---	1.3	0.0	0.5	0.1
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0



of the LTF aircraft at each base with the mission mix at each base in the reduced LTF data sample. The results of this comparison are presented in Table 5, which indicates that the LTF reduced data sample is in general quite representative of the Lead-the-Force aircraft utilization during the data acquisition period.

The reduced data samples are presented in the Appendixes of this report in the form of tabular distributions and cumulative frequency graphs of peak maneuver and gust load factors and of peak derived vertical gust velocity. The tables are reproductions of the computer output tabulations. The total times and distances shown may not agree in the last significant figure with the sum of the values given by data block categories because of rounding. Histograms representing the airspeed and altitude usage of the C-141A aircraft for the various missions flown are also included in the Appendixes.

This data was previously presented in the final periodic data reports which were submitted to the C-141 System Program Office (References 5, 6, and 7). These periodic data reports contain historical flight information for every flight for which data was recorded as well as listings of unusual experience that were encountered during the flights for which the data was reduced. The load factor and  $U_{dg}$  data distributions in the final periodic data reports for the VGH phases of this program are presented by gross weight, altitude, airspeed, base, mission, and mission phase. Also contained in these reports are tabulations of maneuver load factor exceedence data by mission phase and tabulations of derived vertical gust velocity exceedence data by base and mission phase. Inquiries concerning data presented in the final periodic data reports must be directed to the C-141 SPO. The final reduced data samples are presently being employed in fatigue evaluations of the C-141A aircraft.

The data contained herein is described in the following paragraphs.

#### 4.1 INTERIM FLIGHT LOADS DATA

The final data presentations for the Interim Flight Loads phase of the "C-141A Aircraft Flight Loads Data Program" are included in Appendix A of this report. This structural load experience data sample is summarized in the maneuver and gust spectra presented in Figures A1 and A2. Figure A1 is the cumulative frequency (exceedence curve) for the total positive maneuver load experience without regard to any mission parameter or flight condition, and Figure A2 presents the positive derived vertical gust velocity spectrum by altitude obtained during the IFL phase of this program.



The distribution of the reduced Interim Flight Loads data by Air Force Base and mission type is presented in Table 6. It should be noted that the number of hours of reduced data shown in Table 6 does not necessarily equal the total number of flight hours associated with the number of missions indicated in Table 6. In some cases the oscillograph film was completely exposed before the end of the flight and thus the data associated with the end of the flight was not recorded or consequently, reduced. In a few cases, data from only portions of a recorded flight could be reduced because the lack of sufficient fuel utilization information prevented the processing of the later portions of the record. Therefore it is possible that, at a given base and for a given type of mission, the number of flight hours experienced by the aircraft for the number of missions indicated in Table 6 could be greater than the number of hours of reduced data. Thus, the reader should use caution in using the information in Table 6 to determine average mission durations.

The  $U_{de}$  spectra by altitude for each Air Force Base are presented for positive and negative gusts separately in Figures A3 through A6. These spectra of derived vertical gust velocity generally show the usual decrease in the severity of atmospheric turbulence with increasing altitude. However, the data acquired from aircraft stationed at Charleston Air Force Base indicate that the severity of turbulence is greater in the range of altitudes of from 20,000 to 25,000 feet than in the range of 15,000 to 20,000 feet. Further the data acquired at Tinker Air Force Base indicate that the severity of turbulence for altitudes above 25,000 feet is about the same as for the altitude range of 15,000 to 25,000 feet. In as much as the missions flown from Tinker Air Force Base were primarily of a training nature, less than 8 percent of the data yield from Tinker was acquired at altitudes above 25,000 feet. Therefore, the data sample acquired above 25,000 feet from aircraft stationed at Tinker Air Force Base is not believed to be an all inclusive sample of high altitude gust load experience.

Comparisons of the gust spectra of Figures A3 through A6 by Air Force Base reveal expected variations in the severity of turbulence with geographical location. The low altitude gust experience acquired at Tinker Air Force Base is significantly more turbulent than that acquired at the other three bases. For altitudes between 25,000 and 35,000 feet the turbulence experienced by aircraft stationed at Charleston Air Force Base was more severe than that experienced by aircraft assigned to Dover and Travis Air Force Bases.

As the result of the magnitude of the gust load factor threshold limits established for the reduction of the load factor time histories, all of the derived vertical gust velocity data for the first  $U_{de}$  bands ( $5 \leq |U_{de}| < 7.5$ ) was not obtained. The  $U_{de}$  data not included in these bands was that obtained during flight conditions of combined high gross weight and low airspeeds.



TABLE 6

Distribution of the Reduced Flight Loads Data  
Samples (Number and Hours) by Air Force Base and Mission

## INTERIM FLIGHT LOADS PHASE

Air Force Base Mission		Charleston	Dover	Tinker	Travis	Totals
Logistics, Medium Range	No. Hrs.	189 882.8	173 881.3	20 44.5	288 1,245.6	670 3,054.2
Logistics, Long Range	No. Hrs.	3 30.7	--- ---	--- ---	43 424.4	46 455.1
Training	No. Hrs.	64 238.8	95 313.8	449 1,744.0	128 470.4	736 2,767.0
Logistics Drop, Short Range	No. Hrs.	--- ---	3 9.4	--- ---	--- ---	3 9.4
Miscellaneous	No. Hrs.	12 44.7	5 16.3	--- ---	--- ---	17 61.0
Flight Test	No. Hrs.	2 1.2	1 0.6	2 3.5	1 0.6	6 5.9
Airborne Training	No. Hrs.	1 1.5	--- ---	--- ---	--- ---	1 1.5

## LEAD-THE-FORCE FLIGHT LOADS PHASE

Air Force Base Mission		Charleston	Dover	Tinker	Travis	Totals
Logistics, Medium Range	No. Hrs.	98 613.2	137 766.7	22 82.7	400 1,903.1	657 3,365.7
Logistics, Long Range	No. Hrs.	--- ---	2 23.1	--- ---	42 430.9	44 454.0
Training	No. Hrs.	3 23.5	45 166.0	455 1,862.0	60 191.4	563 2,232.9
Miscellaneous	No. Hrs.	2 8.6	--- ---	--- ---	--- ---	2 8.6
Flight Test	No. Hrs.	1 1.4	5 4.4	3 4.2	4 5.4	13 15.4



This combination is normally only prevalent at take-off and thus only the low altitude data of Figures A2 through A6 is significantly affected. The affect of the load factor threshold limits on these  $U_{de}$  exceedence curves is demonstrated by the change in slope of the curves above -7.5 feet per second and below +7.5 feet per second for the lower three altitude ranges. Thus, the data reduction limitation imposed by the load factor threshold limits affects only the first  $U_{de}$  band on both sides of threshold for the low altitude curves. All of the data in the derived vertical gust velocity data bands above +7.5 and below -7.5 feet per second is complete and unbiased.

Tabular distributions of peak derived vertical gust velocity versus altitude for each of the four Air Force Bases involved in this effort are presented in Tables A1 through A4.

In Figures A7 through A20 is presented histograms which show separately the percentages of flight time in selected airspeed and altitude ranges. These histograms for airspeed and altitude are presented in pairs for each of the seven types of missions encountered during this effort. Comparisons by mission of the histograms presented in terms of the percentage of flight time in the various altitude ranges provide an indication of the differences in the mission profiles of the different types of missions. Tables A5 through A11 present the distribution of flight time in the various combined altitude and airspeed increments for each type of mission.

Tabular peak distributions of maneuver load factors, gust load factors, and derived vertical gust velocity versus data block by Air Force Base and mission type are presented in Tables A12 through A65 in Appendix A. A data block is a flight condition defined by one class interval each of gross weight (W), pressure altitude (HH), and equivalent airspeed (A). In order to limit the physical size of this report, the data blocks are given in coded form. The codes employed are identified in Table 7.

The load factor and derived vertical gust velocity class intervals are also presented in coded form as shown in Table 8. For load factor class intervals, the distribution headings represent:

- (1) The lower load factor boundary of the class interval for load factors greater than 1.0, and
- (2) The upper load factor boundary of the class interval for load factors less than 1.0.

For example, load factor, class interval codes of 1.8 and 0.6 refer, respectively, to the class intervals  $1.8 \leq N_z < 2.0$  and  $0.5 < N_z \leq 0.6$ . Thus, it can be seen that the value of load factor presented in the headings corresponds to the absolute lower incremental load factor limit of the class interval. For the  $U_{de}$  distributions the absolute lower limit of the data band is presented in



TABLE 7

Description of the  
Weight, Altitude, and Airspeed Band Codes

<u>WEIGHT</u>		<u>AIRSPEED</u>	
<u>Weight Ranges</u> <u>(1000 lbs.)</u>	<u>W</u> <u>Code</u>	<u>Airspeed Ranges</u> <u>(KEAS)</u>	<u>A</u> <u>Code</u>
$W < 130$	1	$0 \leq V_e < 100$	1
$130 \leq W < 170$	2	$100 \leq V_e < 150$	2
$170 \leq W < 210$	3	$150 \leq V_e < 200$	3
$210 \leq W < 250$	4	$200 \leq V_e < 250$	4
$250 \leq W < 290$	5	$250 \leq V_e < 300$	5
$290 \leq W$	6	$300 \leq V_e < 350$	6
		$350 \leq V_e < 400$	7
		$400 \leq V_e$	8

<u>ALTITUDE</u>	
<u>Altitude Ranges</u> <u>(1000 ft.)</u>	<u>HH</u> <u>Code</u>
$h < 1$	1
$1 \leq h < 2$	2
$2 \leq h < 5$	3
$5 \leq h < 10$	4
$10 \leq h < 15$	5
$15 \leq h < 20$	6
$20 \leq h < 25$	7
$25 \leq h < 30$	8
$30 \leq h < 35$	9
$35 \leq h$	10



TABLE 8

Description of the  
Load Factor and Derived Gust Velocity Bands

<u>N<sub>z</sub> Band</u>		<u>Load Factor Range (g's)</u>	<u>Incremental Acceleration Range (g's)</u>
Gust	Maneuver		
-0.5	-0.5	$N_z \leq -0.5$	$\Delta n \leq -1.5$
0	0	$-0.5 < N_z \leq 0$	$-1.5 < \Delta n \leq -1.0$
0.5	0.5	$0 < N_z \leq 0.5$	$-1.0 < \Delta n \leq -0.5$
0.6	0.6	$0.5 < N_z \leq 0.6$	$-0.5 < \Delta n \leq -0.4$
0.7	0.7	$0.6 < N_z \leq 0.7$	$-0.4 < \Delta n \leq -0.3$
0.8	0.8	$0.7 < N_z \leq 0.8$	$-0.3 < \Delta n \leq -0.2$
0.9		$0.8 < N_z \leq 0.9$	$-0.2 < \Delta n \leq -0.1$
1.1		$1.1 \leq N_z < 1.2$	$0.1 \leq \Delta n < 0.2$
1.2	1.2	$1.2 \leq N_z < 1.3$	$0.2 \leq \Delta n < 0.3$
1.3	1.3	$1.3 \leq N_z < 1.4$	$0.3 \leq \Delta n < 0.4$
1.4	1.4	$1.4 \leq N_z < 1.6$	$0.4 \leq \Delta n < 0.6$
1.6	1.6	$1.6 \leq N_z < 1.8$	$0.6 \leq \Delta n < 0.8$
1.8	1.8	$1.8 \leq N_z < 2.0$	$0.8 \leq \Delta n < 1.0$
2.0	2.0	$2.0 \leq N_z < 2.5$	$1.0 \leq \Delta n < 1.5$
2.5	2.5	$2.5 \leq N_z < 3.0$	$1.5 \leq \Delta n < 2.0$
3.0	3.0	$3.0 \leq N_z$	$2.0 \leq \Delta n$

<u>U<sub>de</sub> Band</u>	<u>U<sub>de</sub> Range (ft/sec)</u>
-35.0	$U_{de} \leq -35.0$
-30.0	$-35.0 < U_{de} \leq -30.0$
-25.0	$-30.0 < U_{de} \leq -25.0$
-20.0	$-25.0 < U_{de} \leq -20.0$
-17.5	$-20.0 < U_{de} \leq -17.5$
-15.0	$-17.5 < U_{de} \leq -15.0$
-12.5	$-15.0 < U_{de} \leq -12.5$
-10.0	$-12.5 < U_{de} \leq -10.0$
- 7.5	$-10.0 < U_{de} \leq - 7.5$
- 5.0	$- 7.5 < U_{de} \leq - 5.0$
+ 5.0	$+ 5.0 \leq U_{de} < + 7.5$
+ 7.5	$+ 7.5 \leq U_{de} < +10.0$
+10.0	$+10.0 \leq U_{de} < +12.5$
+12.5	$+12.5 \leq U_{de} < +15.0$
+15.0	$+15.0 \leq U_{de} < +17.5$
+17.5	$+17.5 \leq U_{de} < +20.0$
+20.0	$+20.0 \leq U_{de} < +25.0$
+25.0	$+25.0 \leq U_{de} < +30.0$
+30.0	$+30.0 \leq U_{de} < +35.0$
+35.0	$+35.0 \leq U_{de}$



the distribution headings. Thus, the  $U_{d_0}$  distribution headings 10 and -15 represent, respectively, the class intervals  $+10 \leq U_{d_0} < 12.5$  and  $-17.5 \leq U_{d_0} < -15.0$ .

#### 4.2 LEAD-THE-FORCE FLIGHT LOADS DATA

The final data presentations for the Lead-the-Force flight loads phase of this program are included in Appendix B. The structural load experience data acquired during this effort is summarized in the exceedence curves of Figures B1 and B2. In Figure B1 is presented the total positive maneuver load factor spectrum. The positive gust load spectrum is presented by altitude in Figure B2. Comparisons of these LTF spectra with those obtained in the Interim Flight Loads effort (Figures A1 and A2) indicate that the overall maneuver load experience of the LTF aircraft and the IFL aircraft were essentially identical and that the gust load experiences of the two sets of data were very similar. The turbulence encountered by the LTF aircraft at lower altitudes is slightly more severe than that encountered by the aircraft instrumented for the Interim Flight Loads effort. The opposite trend is observed for higher altitudes. The distribution of Lead-the-Force Flight Loads data by Air Force Base and mission type is presented in Table 6.

Lead-the-Force aircraft  $U_{d_0}$  spectra by altitude for each Air Force Base are presented for positive and negative gusts separately in Figures B3 through B6. These curves are comparable with the same data obtained for the IFL phase of this program. The same data trends noted in section 4.1 apply to the LTF gust spectra. The turbulence experienced below 10,000 feet by the aircraft assigned to Tinker Air Force Base was more severe than that encountered by the LTF aircraft at the other three bases. For altitudes between 25,000 and 35,000 feet the gust load experience of the aircraft assigned to Charleston Air Force Base was more severe than that experienced by aircraft from Dover and Travis Air Force Bases.

The Lead-the-Force flight loads data was reduced according to the same criteria employed in the reduction of the IFL flight loads data. Thus, the  $U_{d_0}$  data reduced during the LTF phase is also incomplete in the first bands ( $5 \leq |U_{d_0}| < 7.5$ ) for the high gross weight and low airspeed flight conditions. All of the data in the derived vertical gust velocity data bands above +7.5 and below -7.5 feet per second is complete.

Tabulations of the peak distributions of derived vertical gust velocity sorted by altitude for each Base are presented in Tables B1 through B4.

The histograms of Figures B7 through B16 illustrate the percentages of flight time in the various airspeed and in the various altitudes ranges. These bar graphs for airspeed and altitude are presented in pairs for each



of the five types of mission encountered during the Lead-the-Force flight loads effort. As would be expected, the Lead-the-Force aircraft mission profiles, as indicated by the bar graphs of the percentage of flight time in the various altitude ranges, agree well with those obtained for the same type of mission for the IFL phase of this program. Tables B5 through B9 present the distribution of flight time in the various combined altitude and airspeed increments for each type of mission.

Tabulations of the peak distributions of maneuver load factors, gust load factors, and derived vertical gust velocity versus data block by Air Force Base and mission are presented in Tables B10 through B54 in Appendix B. The data block codes utilized in the presentation of this data are identified in Table 7. The data bands headings are precisely defined in Table 8.

#### 4.3 GROUND LOADS STUDY DATA

The data acquired and reduced for the Ground Loads Study phase of this program is presented in Appendix C of this report. This data is presented in the form of tabular distributions by mission phase of incremental ground load factors versus data block. For this phase of the program a data block is an aircraft condition defined by one class interval each of cargo weight (CW) and fuel weight (FW). As in the case for all load factor distributions presented in this report, in the table heading is presented the value of load factor corresponding to the absolute lower incremental load factor limit of the data band, see Table 9. Table 9 also contains the codes for the cargo weight and fuel weight bands utilized in presenting the data.

A total reduced data sample of 174.5 hours of ground load experience data is presented in Appendix C. The number of occurrences and the number of hours in this data sample for each of the five mission phases are presented in Table 10.

TABLE 10

Distribution of the Reduced Ground  
Loads Data Sample by Mission Phase

<u>Mission Phase</u>	<u>Number of Occurrences</u>	<u>Number of Hours</u>
Taxi	1,218	155.1
Take-off Run	725	5.8
Landing Roll-out	679	8.8
Touch-and-Go Roll	682	3.7
Landing Impact	1,360	1.1



TABLE 9

Ground Loads Study  
Weight and Load Factor Band Descriptions

<u>CARGO WEIGHT</u>		<u>FUEL WEIGHT</u>	
<u>Cargo Wt. Range</u> <u>(1000 lbs)</u>	<u>Code</u>	<u>Fuel Wt. Range</u> <u>(1000 lbs)</u>	<u>Code</u>
$C \leq 10$	1	$F \leq 10$	1
$10 < C \leq 20$	2	$10 < F \leq 20$	2
$20 < C \leq 30$	3	$20 < F \leq 35$	3
$30 < C \leq 40$	4	$35 < F \leq 50$	4
$40 < C \leq 50$	5	$50 < F \leq 65$	5
$50 < C \leq 60$	6	$65 < F \leq 80$	6
$60 < C \leq 70$	7	$80 < F \leq 95$	7
$70 < C$	8	$95 < F \leq 110$	8
		$110 < F \leq 125$	9
		$125 < F$	10

<u>LOAD FACTOR</u>		
<u><math>N_z</math> Band</u>	<u>Load Factor</u> <u>Range (g's)</u>	<u>Incremental Load</u> <u>Factor Range (g's)</u>
0.0	$N_z \leq 0$	$\Delta n \leq -1.0$
0.30	$0 < N_z \leq .30$	$-1.0 < \Delta n \leq -0.70$
0.50	$.30 < N_z \leq .50$	$-0.70 < \Delta n \leq -0.50$
0.60	$.50 < N_z \leq .60$	$-0.50 < \Delta n \leq -0.40$
0.70	$.60 < N_z \leq .70$	$-0.40 < \Delta n \leq -0.30$
0.75	$.70 < N_z \leq .75$	$-0.30 < \Delta n \leq -0.25$
0.80	$.75 < N_z \leq .80$	$-0.25 < \Delta n \leq -0.20$
0.85	$.80 < N_z \leq .85$	$-0.20 < \Delta n \leq -0.15$
0.90	$.85 < N_z \leq .90$	$-0.15 < \Delta n \leq -0.10$
0.95	$.90 < N_z \leq .95$	$-0.10 < \Delta n \leq -0.05$
1.05	$1.05 \leq N_z < 1.10$	$0.05 \leq \Delta n < 0.10$
1.10	$1.10 \leq N_z < 1.15$	$0.10 \leq \Delta n < 0.15$
1.15	$1.15 \leq N_z < 1.20$	$0.15 \leq \Delta n < 0.20$
1.20	$1.20 \leq N_z < 1.25$	$0.20 \leq \Delta n < 0.25$
1.25	$1.25 \leq N_z < 1.30$	$0.25 \leq \Delta n < 0.30$
1.30	$1.30 \leq N_z < 1.40$	$0.30 \leq \Delta n < 0.40$
1.40	$1.40 \leq N_z < 1.50$	$0.40 \leq \Delta n < 0.50$
1.50	$1.50 \leq N_z < 1.70$	$0.50 \leq \Delta n < 0.70$
1.70	$1.70 \leq N_z < 2.00$	$0.70 \leq \Delta n < 1.00$
2.00	$2.00 \leq N_z$	$1.00 \leq \Delta n$



The data reduced in the GLS phase is summarized in the incremental load factor exceedence curves presented in Figures C1 and C2. In Figure C1 is presented the cumulative number of positive  $\Delta n$  peaks per hour equal to or greater than  $\Delta n$  versus incremental load factor for each of the mission phases of Taxi, Take-off Run, Landing Roll-out, and Touch-and-Go Roll. The cumulative frequency of positive  $\Delta n$  peaks versus  $\Delta n$  for the Landing Impact mission phase is presented in Figure C2. This curve is presented on a per landing basis. Because of the shape of the curve in Figure C2 below  $\Delta n$  equal to 0.1g, it appears that a number of the peaks in the first data band were "lost" in data reduction. Because of the high frequency of the normal load factor time history in this mission phase, it is extremely difficult and sometimes impossible to resolve and reduce the low-magnitude peaks from the oscillograph trace. Thus, an exponential extrapolation of the remainder of the curve into this range ( $0.05 \leq \Delta n < 0.1$ ) would seem to provide a more realistic representation of the aircraft load experience in the Landing Impact mission phase.

The distribution of ground load factors by data block and by mission phase are presented in Tables C1 through C5 in Appendix C. This same data sample was further sorted by the base to which the aircraft were assigned when the data was acquired and by the Air Force Base or airport at which the data was acquired. The data distributions by mission phase for these sorts is presented in Tables C6 through C8 and in Tables C9 through C77, respectively. These latter tables are presented in alphabetical order by the name of the base. A list of the bases at which data was acquired during this effort are presented in Table 11.

#### 4.4 ATMOSPHERIC TURBULENCE STUDY DATA

In Table D1 of Appendix D is presented a list of routes for which Atmospheric Turbulence Study data was acquired and reduced. Included in this table is the total accumulated flight time and distance traveled over each of these routes. The peak derived vertical gust velocity data for each of these routes was coded by altitude band, by the atmospheric conditions under which the data was obtained, and the season and month during which the data was acquired.

According to specifications by MAC Air Weather Service, data acquired over routes for which the total reduced data sample was less than 20 flight hours and data obtained during local flights was eliminated in the composited data sample. The routes for which the data is presented in Appendix D are identified in table D1 by an asterisk.

In Table D2a is presented tabular distributions of peak  $U_{de}$  by altitude for storm conditions, non-storm conditions, and for the sum of the storm and



TABLE 11

List of Bases at Which Data was Acquired and  
Reduced for the Ground Loads Study

Altus AFB, Oklahoma	Pittsburgh-Monroeville, Pennsylvania
Amarillo AFB, Municipal, Texas	Pleiku A/D, Vietnam
Anderson AB, Guam	Point Mugu NAS, California
Andrews AFB, Washington	Randolph AFB, Texas
Antigua, West Indies	Rhein Main A/D, Germany
Ascension Island, South Atlantic	Richards-Gebaur AFB, Missouri
Beale AFB, California	Robins AFB, Georgia
Bien Hoa A/D, Vietnam	Saigon, Tan Son Nhut A/D, Vietnam
Cannon AFB, New Mexico	Scott AFB, Illinois
Carwell AFB, Texas	Sheppard AFB, Texas
Chambley AB, France	Tainan A/D, Taiwan, Formosa
Charleston AFB/Municipal, South Carolina	Takhli A. D, Thailand
Clark AB, Philippines	Tinker AFB, Oklahoma
Classified	Travis AFB, California
Clinton-Sherman AFB, Oklahoma	Tulsa International, Oklahoma
Dallas Love Field, Texas	Ubon A/D, Thailand
Denang AB, Vietnam	Wake Airport, Wake Is. and
Dobbins AFB/NAS, Georgia	Wheelus AB, Libya
Don Muang A/D, Bangkok, Thailand	Whiteman AFB, Missouri
Dover AFB, Delaware	Wilkes-Barre-Scranton, Pennsylvania
Edwards AFB, California	Wright-Patterson AFB, Ohio
Elmendorf AFB, Alaska	Yokota AB, Japan
Forbes AFB, Kansas	Youngstown Municipal, Ohio
Ft. Smith Municipal, Arkansas	
Goose Bay, Labrador	
Greater Southwest International, Texas	
Hickam AFB, Hawaii	
Hill AFB, Utah	
Hunter AFB, Georgia	
Kadena AB, Okinawa	
Kelly AFB, Texas	
Kimpo International Airport, Seoul, Korea	
Kindley AFB, Bermuda	
Lajes A/D, Azores	
Lakehurst NAS, New Jersey	
March AFB, California	
McChord AFB, Washington	
McClellan AFB, California	
McConnell AFB, Kansas	
McCoy AFB, Florida	
McGuire AFB, New Jersey	
Minnesota-St. Paul International, Minnesota	
New Orleans NAS, Louisiana	
Niagara Falls Municipal, New York	
North Island NAS, California	
Patrick AFB, Florida	



non-storm conditions for all of the routes included in the composited data sample. The total composited sample, which includes 2,786 flight hours of data was sorted by season and by month. The tabular distributions of  $U_{de}$  by season are presented in Table D2b through Table D2e, and by month in Tables D2f through D2q. This same method of presentation was employed for reporting the data for each of the 32 routes being studied. The data for each of these routes is presented in Tables D3 through D34.

Since the  $U_{de}$  data for the turbulence study is also a part of the IFL data sample, the same comments made in section 4.1, regarding the completeness of the first  $U_{de}$  bands for the lower altitude ranges apply to the Atmospheric Turbulence Study.

The investigator should be continuously aware of the means employed to identify the data with the atmospheric conditions surrounding the aircraft. The derived vertical gust velocity data for altitudes above 15,000 feet was identified as having been acquired under storm or non-storm conditions according to the position of a manual switch monitored by the aircraft's co-pilot. The first and primary responsibility of the co-pilot is to assist in the flying of the aircraft and not that of monitoring the turbulence switch. Analyses of the data have led the author to believe that under some situations the co-pilot's first responsibility required his undivided attention, and thus it was not always possible for him to continuously monitor the position of the turbulence switch. Since there was no way during data reduction to evaluate the conditions of the environment at the time and location at which the data was recorded, no attempt was made to correct or modify the recorded data in any way.

The results of the Atmospheric Turbulence Study are briefly summarized in the exceedence curves in Figures D1 and D2. In Figure D1 is presented a comparison of the positive  $U_{de}$  gust data acquired during each of the four seasons at altitudes of 30,000 feet and above. The altitude range of 30,000 feet and above was selected for this comparison since this range represents the cruising altitudes for logistic flights and does not include much data acquired in ascent and descent near given localities. The curves of Figure D1 indicate that the turbulence during the Winter season is more severe than during the remainder of the year. These curves further indicate that for the larger values of  $U_{de}$  the Spring season is the least severe of the four seasons.

In Figure D2 is shown a comparison of the total positive gust data for two routes: for the route between Hickam Air Force Base, Hawaii and Clark Air Force Base, Philippines; and for the route between Clark Air Force Base and Saigon, Tan Son Nhut Air Depot, Vietnam. The routes were selected for this comparison because they are representative of the less turbulent and more turbulent routes, respectively, included in the composite



data sample. Also, the data sample for each of these two routes included data acquired during each of the four seasons of the year. The route between Clark Air Force Base and Saigon is about three times more turbulent than that between Hickam and Clark Air Force Bases.

#### 4.5 DATA ACCURACY

A thorough investigation of the errors in the entire instrumentation and data reduction systems was conducted. All possible sources of error were either empirically determined or liberally estimated. Then, these errors were combined by standard statistical techniques to obtain total error. The results of this investigation indicated that the total two-standard deviation error for a 2.0g full scale incremental load factor reading was 0.0924g. Comparison of the estimated full scale two-standard deviation errors incurred by the data acquisition and data reduction systems with the program's requirements is presented in Table 12. The errors in 95% of the load factor data were less than or equal to the limits defined by the two-standard deviation values.

TABLE 12

Comparison of the Load Factor Two-Standard Deviation Errors  
With the Specified Limits  
(Based on Full Scale Reading of 2.0g)

	Errors Incurred	Specified Limits
Instrumentation	$\pm 4.2\%$	$\pm 5\%$
Data Reduction	$\pm 0.0386g$	$\pm 0.05g$
Overall	$\pm 0.0924g$	$\pm 0.112g$

Thus, it is apparent that the accuracy of the data was well within the limits specified for this program.



## SECTION V

### CONCLUSIONS

The pertinent conclusions from this study are as follows:

1. The data presented in this report is representative of the gust, maneuver, and ground load histories experienced by the C-141A aircraft fleet during the period from September 1965 through September 1966. During this period the C-141A fleet operations were conducted under 80% restriction.
2. All of the objectives of this program have been fulfilled, and the total two-standard deviation error of the data is  $\pm 0.09g$ . Thus the error in 95% of the data, based upon a 2.0g full scale reading, is  $\pm 0.09g$  or less.
3. cursory comparisons of the Lead-the-Force data sample with that obtained during the Interim Flight Loads phase indicated that the Lead-the-Force aircraft load experiences are similar to those of the remainder of the fleet.
4. The derived vertical gust velocity data in the first data band on each side of threshold ( $5 \leq U_{d0} < 7.5$  fps and  $-7.5 < U_{d0} \leq -5$  fps) is incomplete for some data blocks because of limitations imposed in data reduction caused by the selection of the gust load factor reading threshold limits. This limitation affects  $U_{d0}$  data acquired in the low airspeed and high gross weight flight conditions.
5. The atmospheric turbulence data was identified with atmospheric conditions by requesting the aircraft's co-pilot to monitor a manual switch. The co-pilot's primary responsibilities may not have allowed him in all cases to monitor this switch as closely as would be desired.
6. The Atmospheric Turbulence Study data was acquired and reduced for use in meteorological studies. Because of the storm and non-storm criteria employed for this study - this data should not be employed for structural analysis calculations.



PREVIOUS PAGE BLANK - NOT TIDED

APPENDIX A

INTERIM FLIGHT LOADS DATA



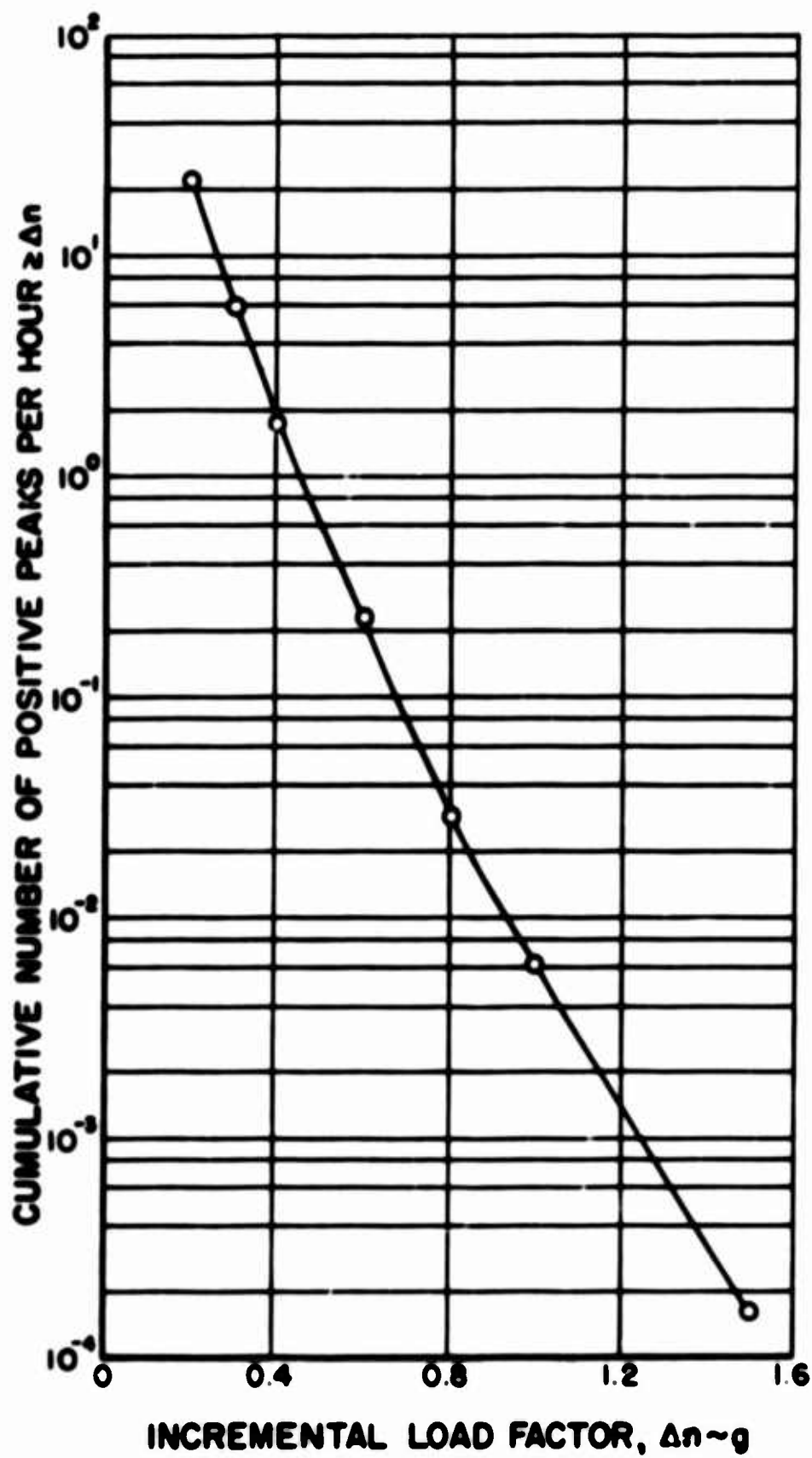


Figure A1. Positive Maneuver Spectrum Obtained from 6,354 Flight-Hours of Interim Flight Loads Data



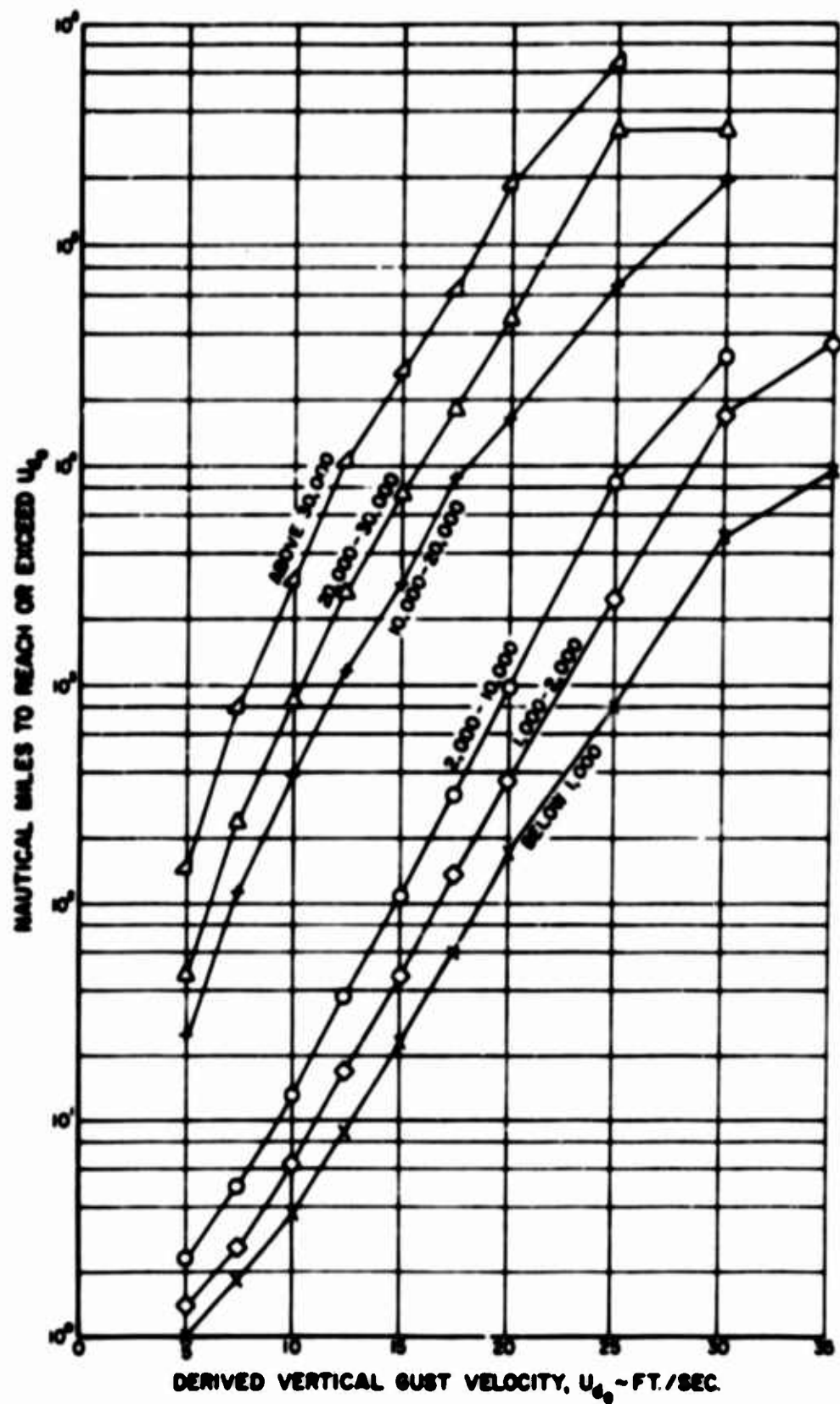


Figure A2. Positive Gust Spectrum by Altitude  
Obtained from 6,354 Flight-Hours of  
Interim Flight Loads Data



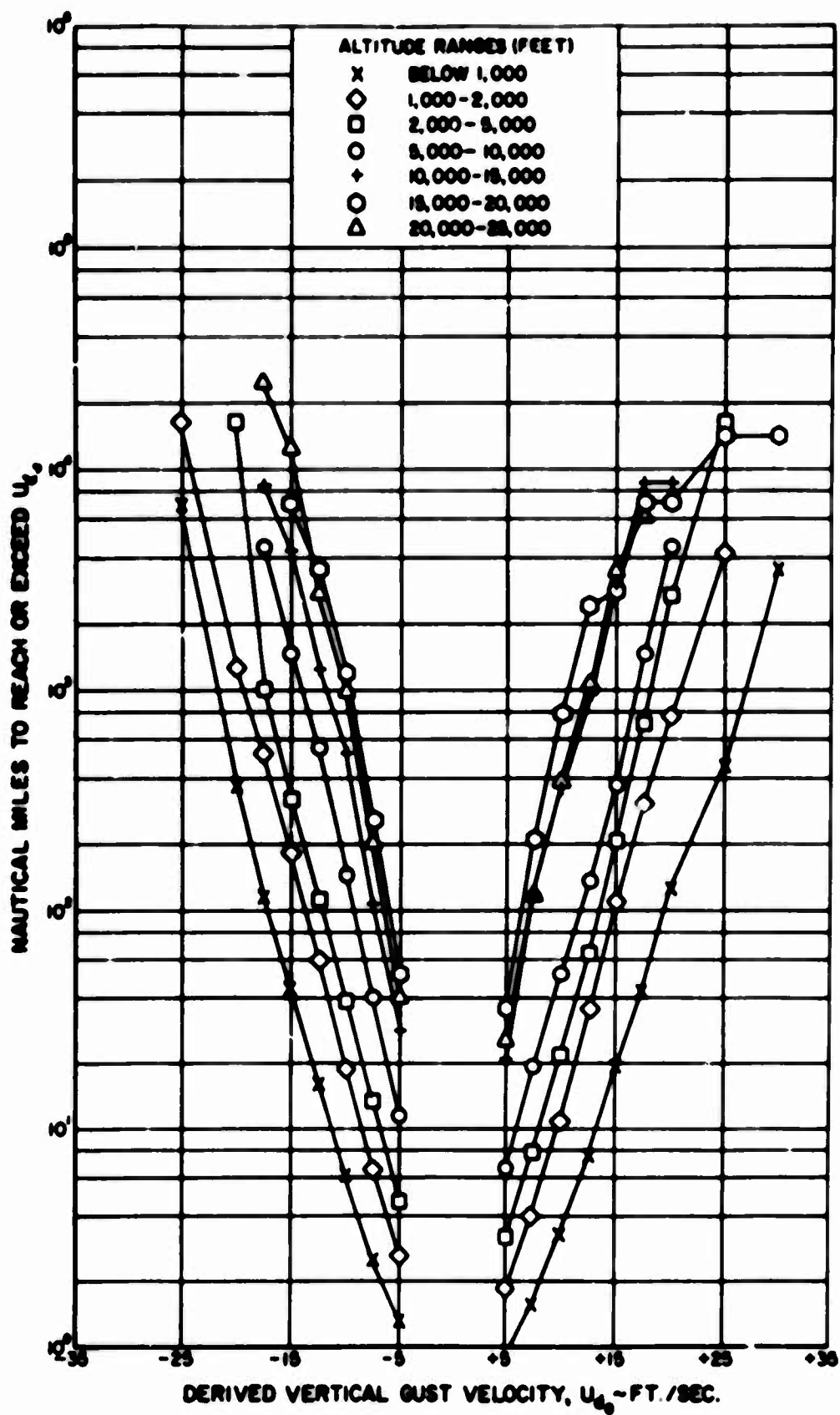


Figure A3. Gust Spectrum by Altitude Obtained from 1,200 Flight-Hours of IFL Data Acquired at Charleston Air Force Base (Refer to Table A1)



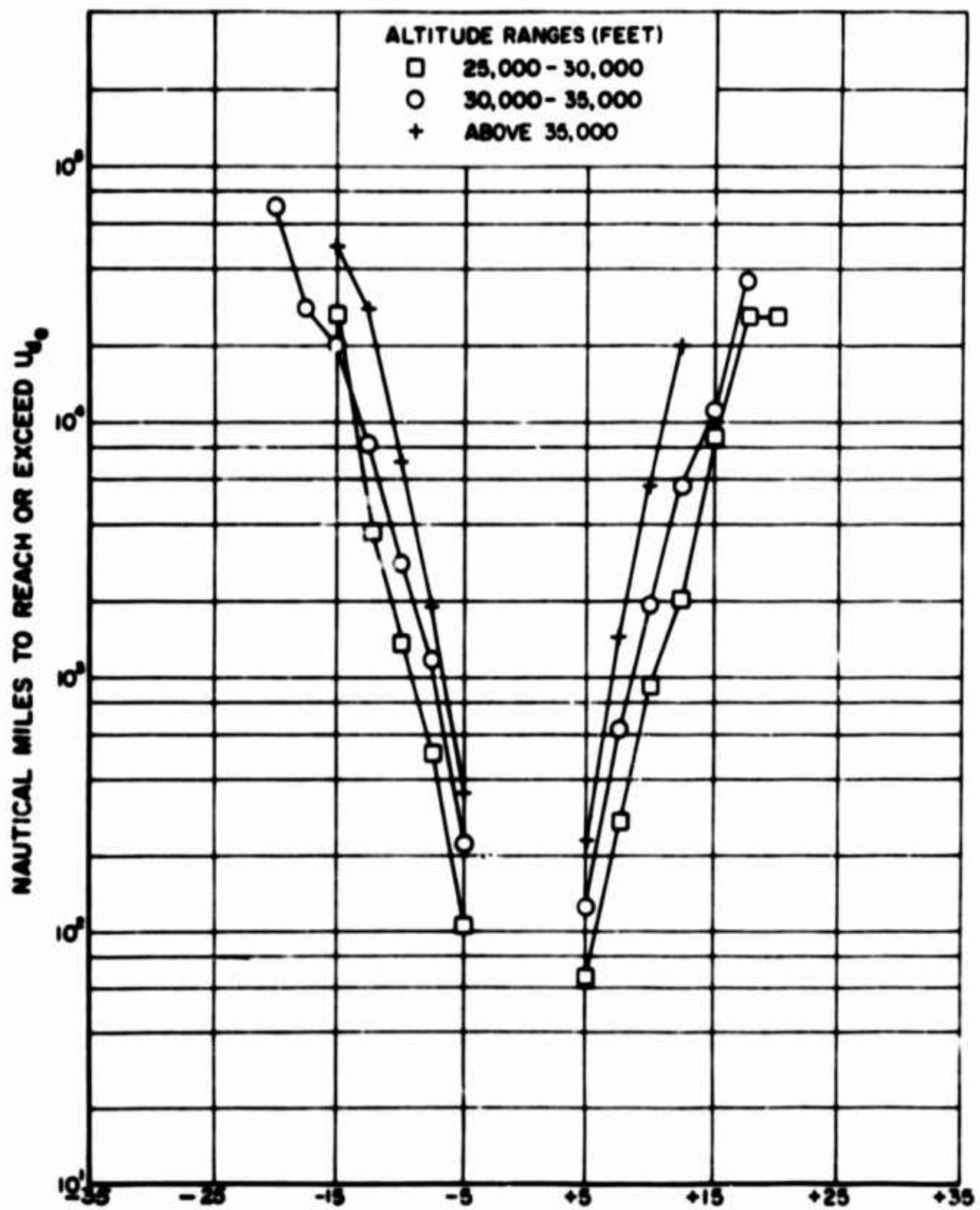
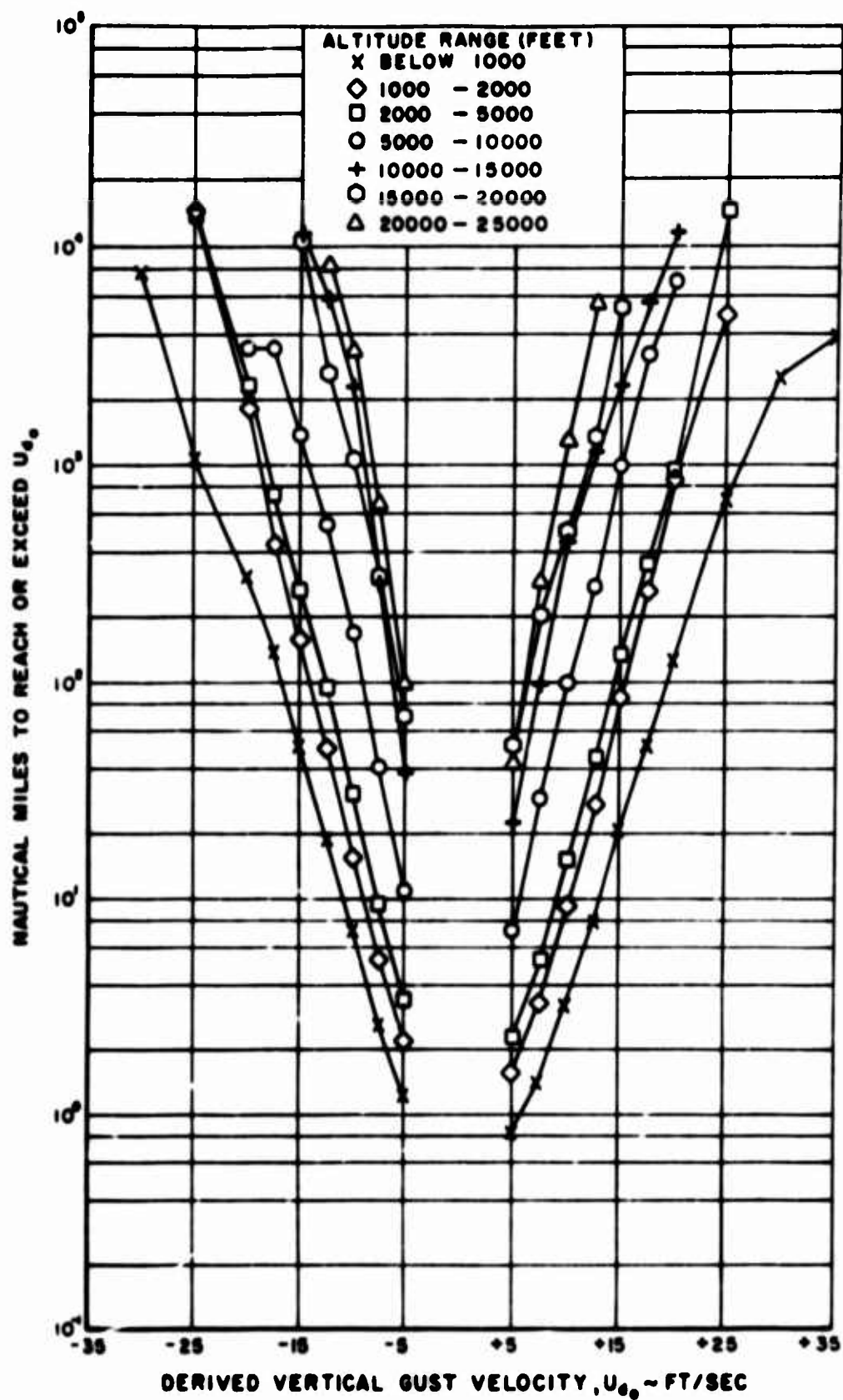


Figure A3 --- concluded





**Figure A4. Gust Spectrum by Altitude Obtained from 1,221 Flight-Hours of IFL Data Acquired at Dover Air Force Base (Refer to Table A2)**



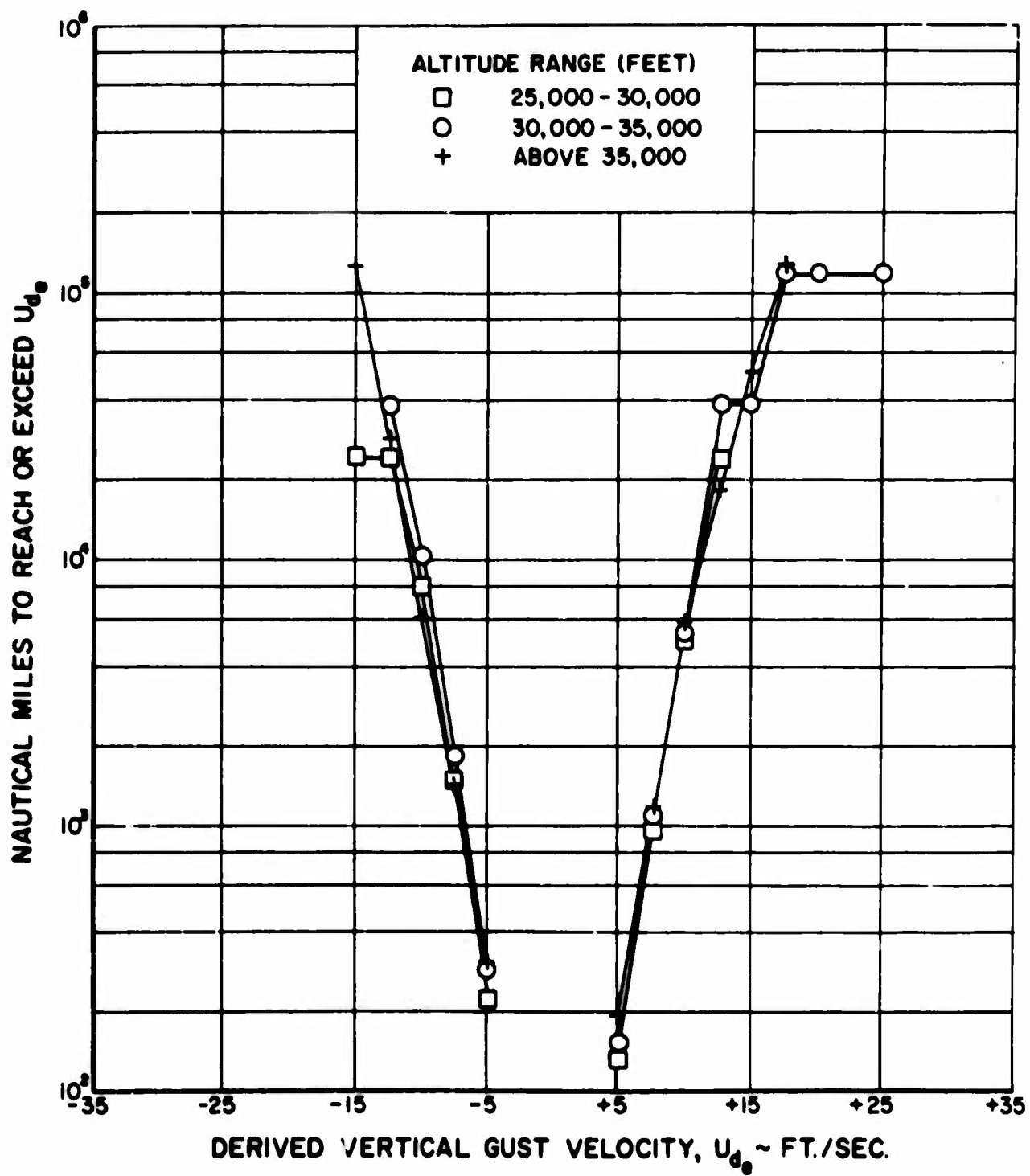


Figure A4 --- Concluded



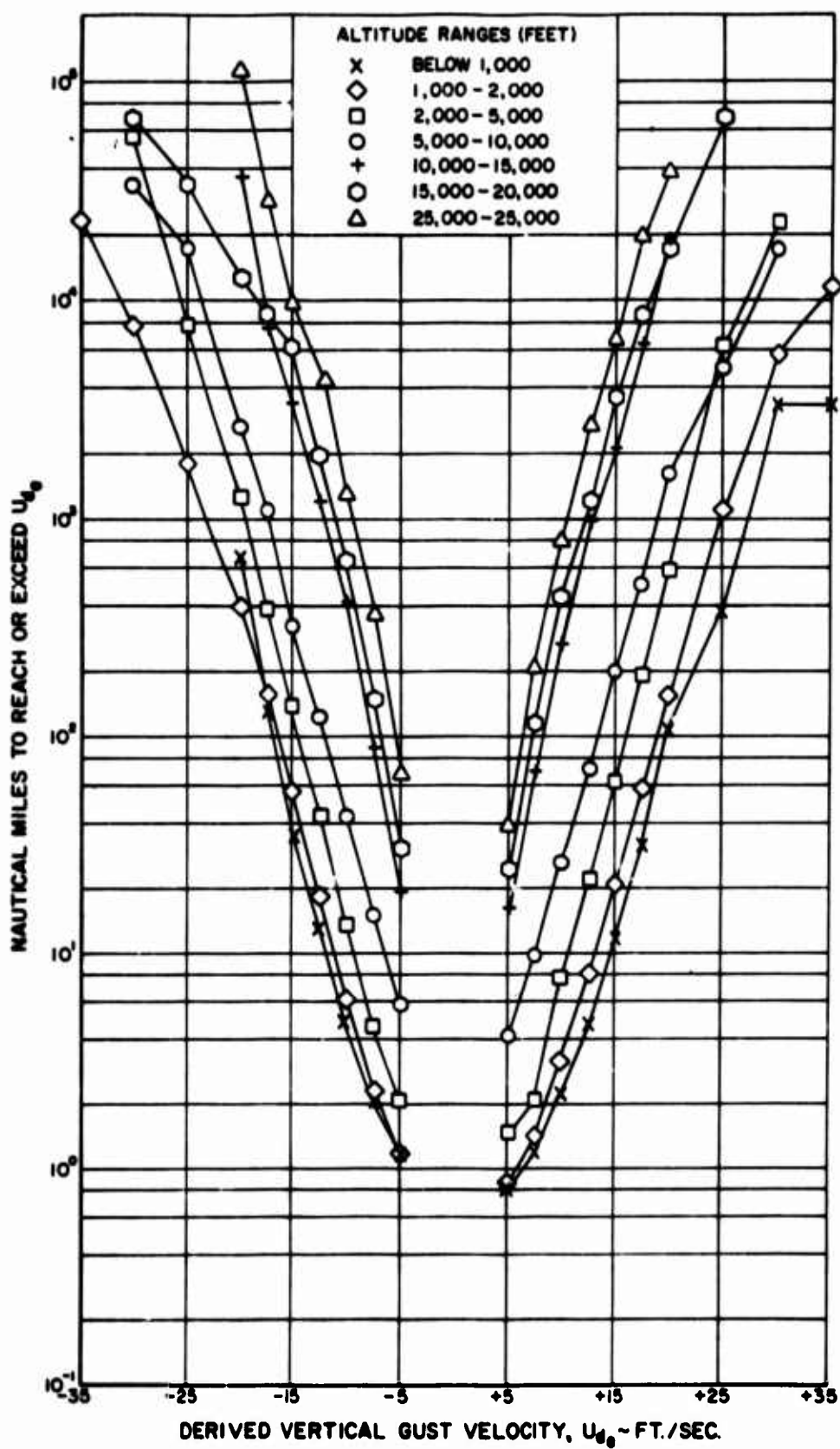


Figure A5. Gust Spectrum by Altitude Obtained from 1,792 Flight-Hours of IFL Data Acquired at Tinker Air Force Base (Refer to Table A3)





Figure A5 --- concluded



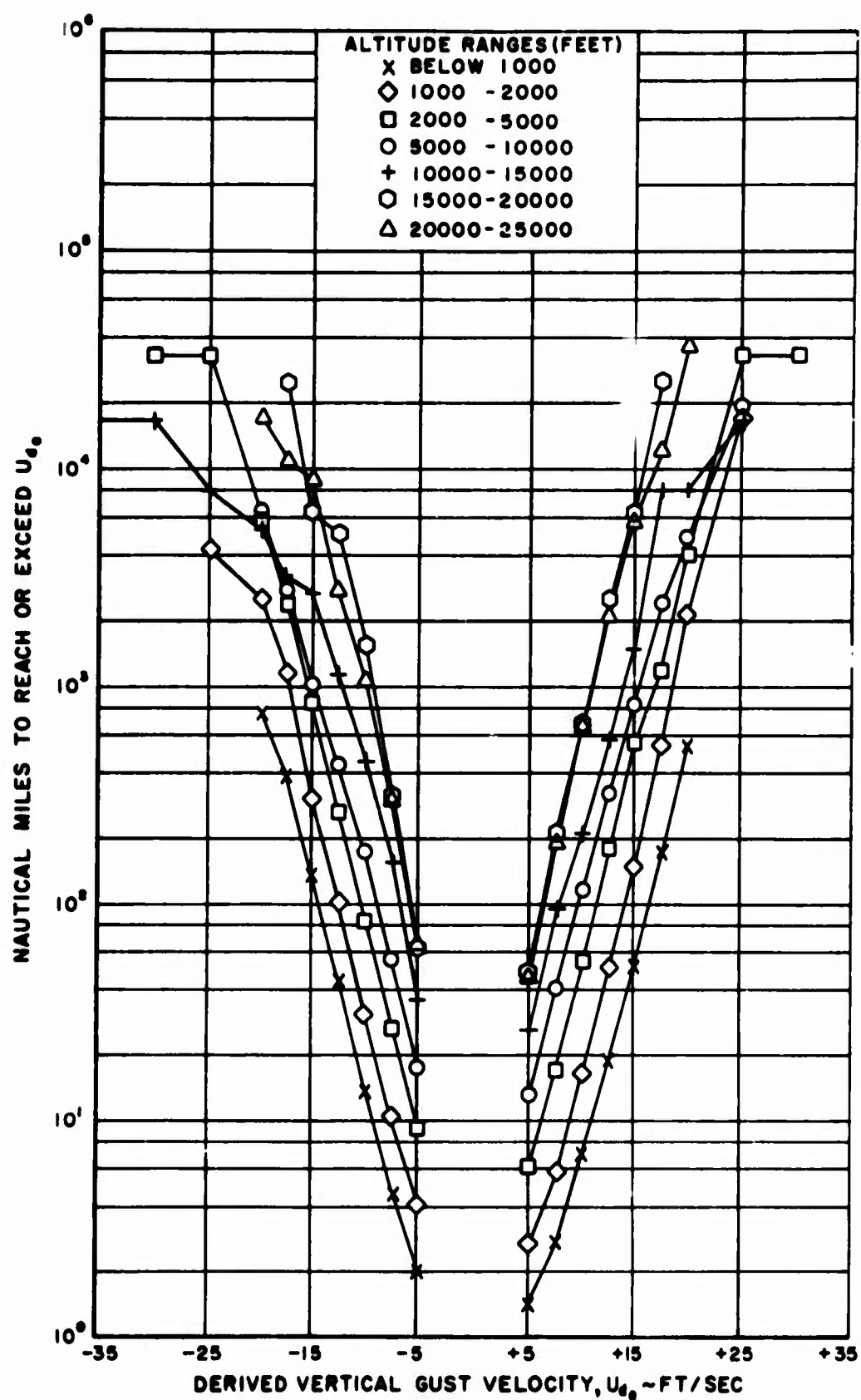


Figure A6. Gust Spectrum by Altitude Obtained from 2,141 Flight-Hours of IFL Data Acquired at Travis Air Force Base (Refer to Table A4)



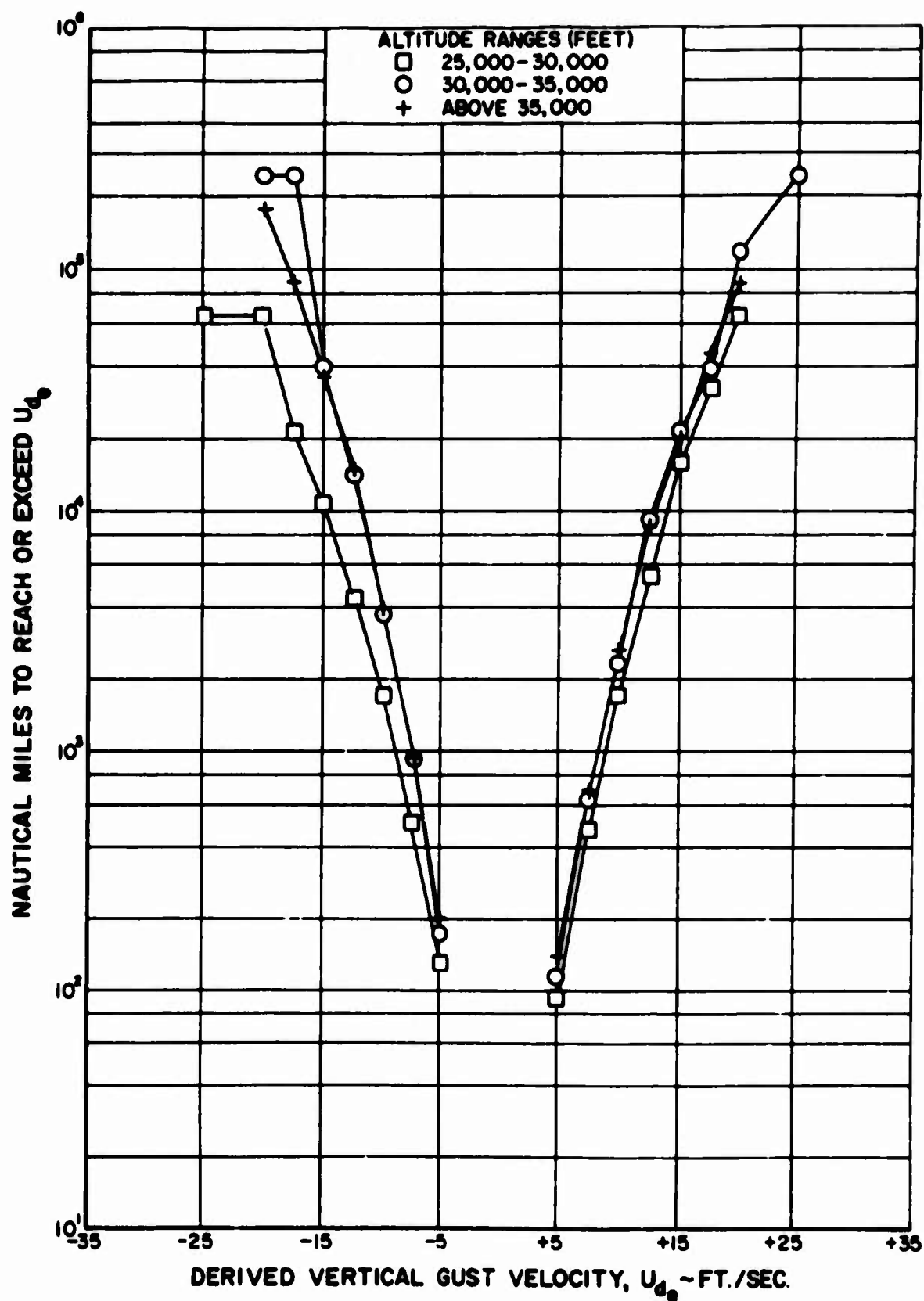


Figure A6 --- concluded



TABLE A1  
DISTRIBUTION OF OBSERVED VERTICAL GUST VELOCITY  
BY ALTITUDE  
PER THE  
CHARLOTTE AIR FORCE BASE  
DATA SAMPLE

ALTITUDE (1000 FT)	DISTANCE (MILES)	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																					
			-25	-20	-15	-10-17.5	-15	-12.5	-10	-7.5	-5	-2.5	0	2.5	5	7.5	10	12.5	15-17.5	20	25	30-35		
COLUMN 1	6079.3	12600				1	10	42	133	204	712	1040	2000	2000	2000	1000	500	100	137	43	10	2		
1 TO 2	10001.0	10000				1	17	10	60	193	600	1700	1000	4000	2000	1000	500	100	10	10	0			
2 TO 5	10077.1	6007					1	10	34	96	270	807	1000	1000	1000	607	170	90	17	0	1			
5 TO 10	6000.0	2120						2	4	13	46	100	900	900	200	170	0	10	0	2				
10 TO 15	6030.0	710						1	1	0	10	00	207	207	00	10	0	2		1				
15 TO 20	10041.0	600							2	2	0	40	210	207	00	10	1	0		1		1		
20 TO 25	20017.3	1972						1	1	7	10	07	400	700	100	00	10	0	0					
25 TO 30	20000.0	607							1	0	10	00	200	100	00	10	10	2		1				
30 TO 35	10027.7	1700						2	0	2	10	00	71	910	900	100	00	10	0	0				
ABOVE 35	10001.0	1011							0	1	21	70	400	700	100	20	10							
TOTAL	60079.4	60020						2	30	60	200	610	1700	6072	11070	10000	7100	2017	1100	200	100	00	10	1

TABLE A2  
DISTRIBUTION OF OBSERVED VERTICAL GUST VELOCITY  
BY ALTITUDE  
PER THE  
JAMES H. HARRIS AIR FORCE BASE  
DATA SAMPLE

ALTITUDE (1000 FT)	DISTANCE (MILES)	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
			-25	-20	-15	-10-17.5	-15	-12.5	-10	-7.5	-5	-2.5	0	2.5	5	7.5	10	12.5	15-17.5	20	25	30-35
COLUMN 1	7002.3	12001		1	0	10	20	90	200	600	1000	1000	2000	1000	500	100	100	02	00	0	1	2
1 TO 2	10000.7	10070				1	7	20	90	200	600	1000	1700	4700	2007	1000	500	117	20	10	0	
2 TO 5	10112.1	17371				1	0	10	30	90	300	1000	2000	2007	1700	612	210	00	20	10	1	
5 TO 10	6000.7	1000					2		0	20	100	600	717	170	00	10	0	1	1			
10 TO 15	11000.3	000						1	1	0	00	200	200	01	10	0	0	1	1			
15 TO 20	10000.2	000						1	0	0	20	117	100	10	10	0	0	2				
20 TO 25	10007.0	070							2	1	20	100	200	00	10	0						
25 TO 30	20001.2	200						1		2	10	01	107	20	0	1						
30 TO 35	11000.0	1100							0	0	01	200	600	00	10		2			1		
ABOVE 35	20001.0	2000							2	7	30	100	710	1100	170	20	0	0	2			
TOTAL	47210.4	40000		1	0	37	60	100	600	1000	10007	10000	6100	2002	1001	611	100	70	10	1	2	



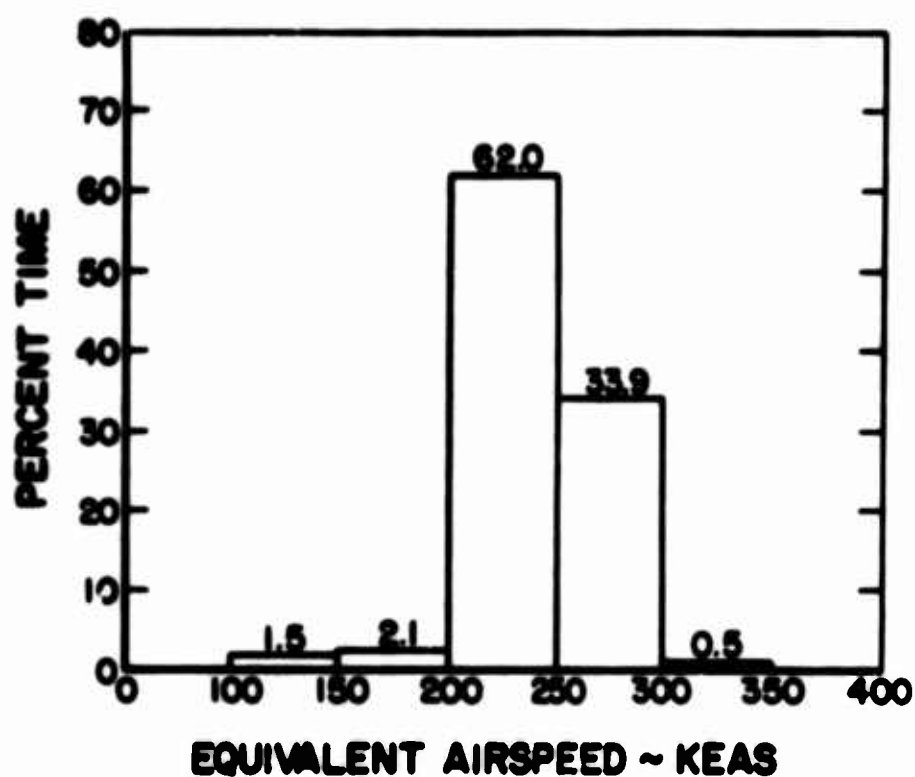
TABLE A3  
DISTRIBUTION OF MEASURED VERTICAL GUST VELOCITY  
BY ALTITUDE  
FOR THE  
FIVE AIR FORCE BASES  
DATA SAMPLE

ALTITUDE (1000 FT)	DISTANCE IN MILES	TOTAL PERCENT	GUST DISTRIBUTION (FT./SEC.)													
			-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40
0000 1	1076.4	7071			5	21	71	104	400	900	1200	1000	1000	700	400	100
1 10 2	21291.1	40073	1	2	10	44	90	272	871	1004	1044	1470	1001	9104	4400	1701
2 10 3	111001.1	100007		2	13	76	200	100	1016	9016	10000	11001	10000	10000	10000	10000
3 10 13	34430.4	10000		1	1	11	10	77	171	512	1400	1000	4000	1000	1000	1000
13 10 10	17013.0	4004			1	4	6	23	61	301	1000	1000	410	100	10	10
10 10 23	60007.2	9070		1	1	1	3	9	24	70	100	1007	2001	400	100	10
20 10 23	110000.2	4000			1	3	9	10	60	204	1000	2401	412	100	20	10
20 10 13	12047.2	402			1	2	3	10	90	210	204	94	20	6	1	1
20 10 10	12046.2	302				1	2	3	7	10	110	104	31	9	7	
40000 10	4000.0	307				1	1	1	3	21	101	100	10	9		
TOTAL	611002.0	210000	1	6	20	104	300	973	3000	6410	26070	31400	52707	20070	10104	6302201

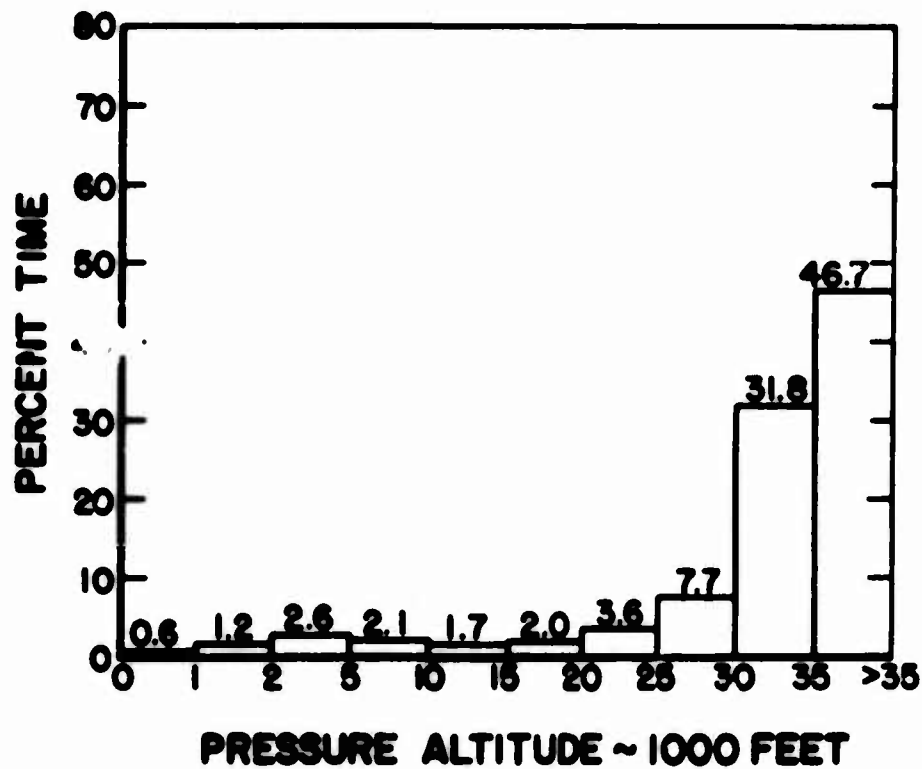
TABLE A4  
DISTRIBUTION OF MEASURED VERTICAL GUST VELOCITY  
BY ALTITUDE  
FOR THE  
FIVE AIR FORCE BASES  
DATA SAMPLE

ALTITUDE (1000 FT)	DISTANCE IN MILES	TOTAL PERCENT	GUST DISTRIBUTION (FT./SEC.)													
			-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40
0000 1	9076.0	11700			13	12	67	104	302	1407	2000	3277	2100	900	907	100
1 10 7	17000.0	10000		4	3	0	42	113	207	1116	2770	3001	1011	700	204	04
2 10 0	1000.0	0002		1	5	0	20	07	270	003	2000	0013	1010	402	124	04
3 10 13	1017.2	2000			3	4	12	26	64	240	720	007	100	100	10	10
10 10 10	10107.4	1000		1	1	1	2	1	0	21	60	100	406	91	40	17
10 10 23	24010.2	012				1	3	1	11	63	117	431	70	27	6	3
20 10 23	10002.4	1002			2	1	1	9	20	66	440	001	104	10	11	3
20 10 13	64077.1	1100			1	2	3	9	20	60	172	001	90	20	6	3
30 10 10	21012.3	2470			1	9	31	40	100	1100	1714	270	77	10	9	4
40000 10	104704.1	4000			2	2	6	10	60	201	1010	2702	100	94	24	9
TOTAL	611132.4	40197	1	1	6	30	40	100	420	1440	6401	12000	16000	5704	2470	622





**Figure A7 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Logistics Medium Range Missions**



**Figure A8 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Logistics Medium Range Missions**



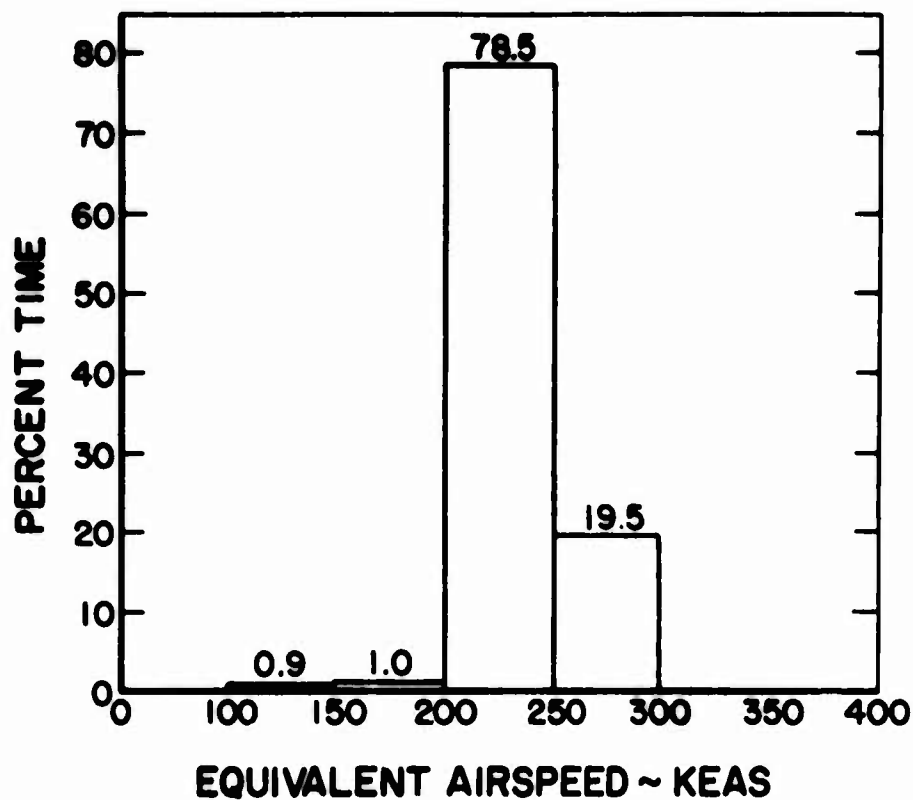


Figure A9 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Logistics Long Range Missions

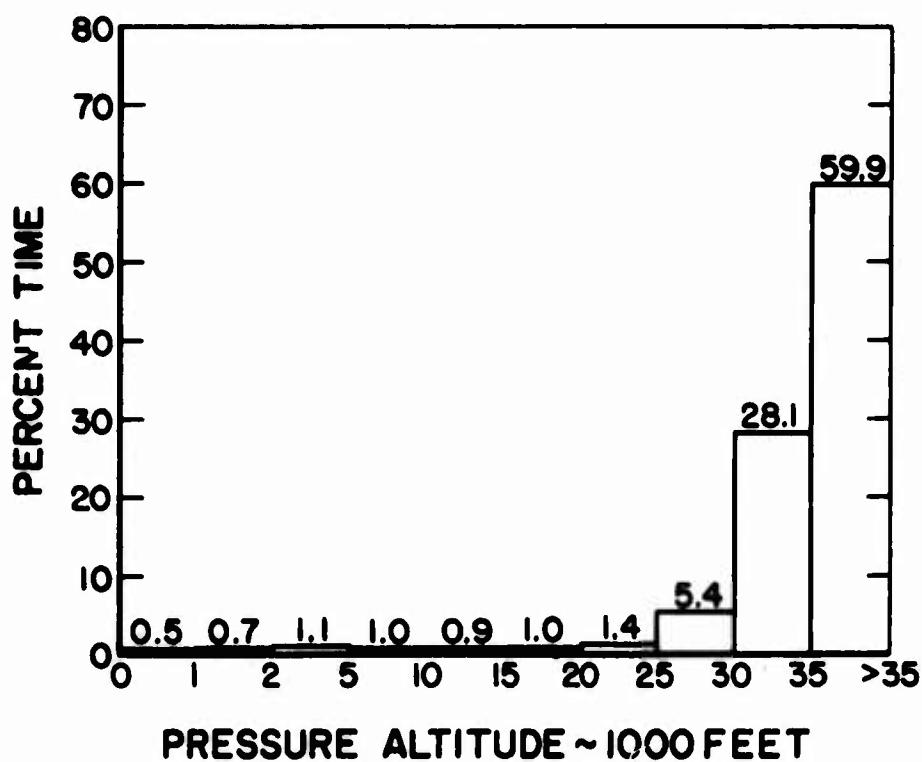


Figure A10 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Logistics Long Range Missions



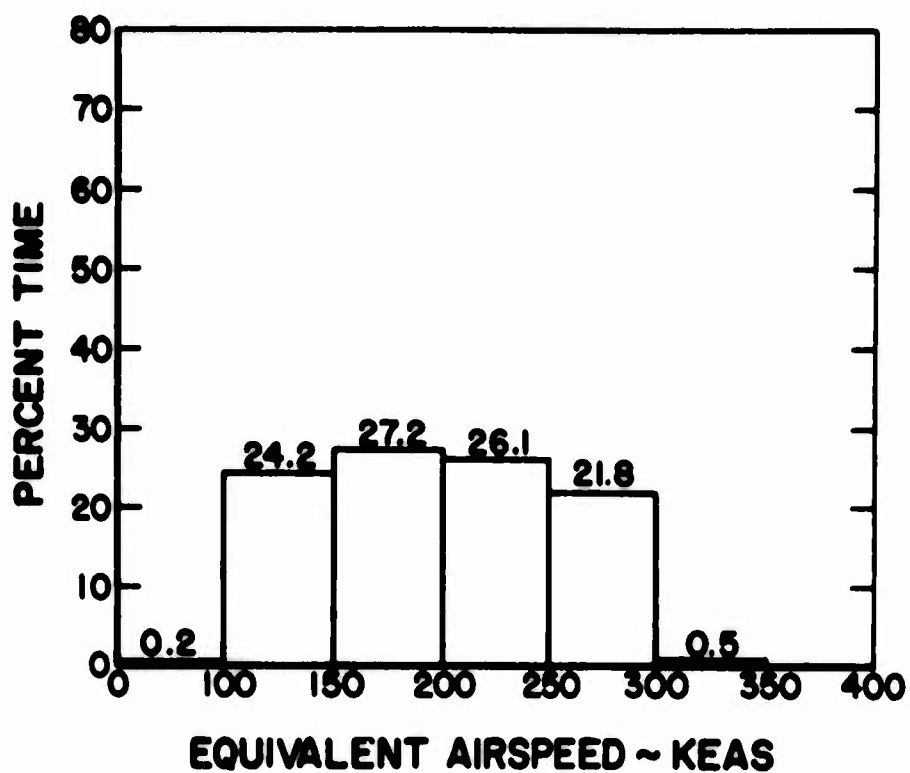


Figure A11 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Training Missions

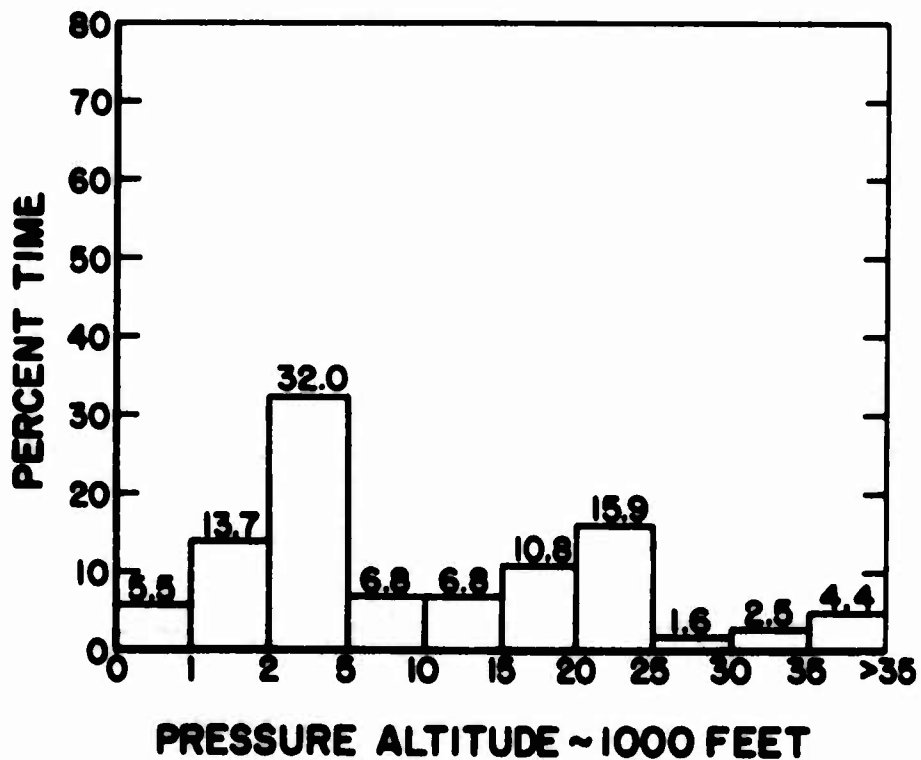


Figure A12 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Training Missions



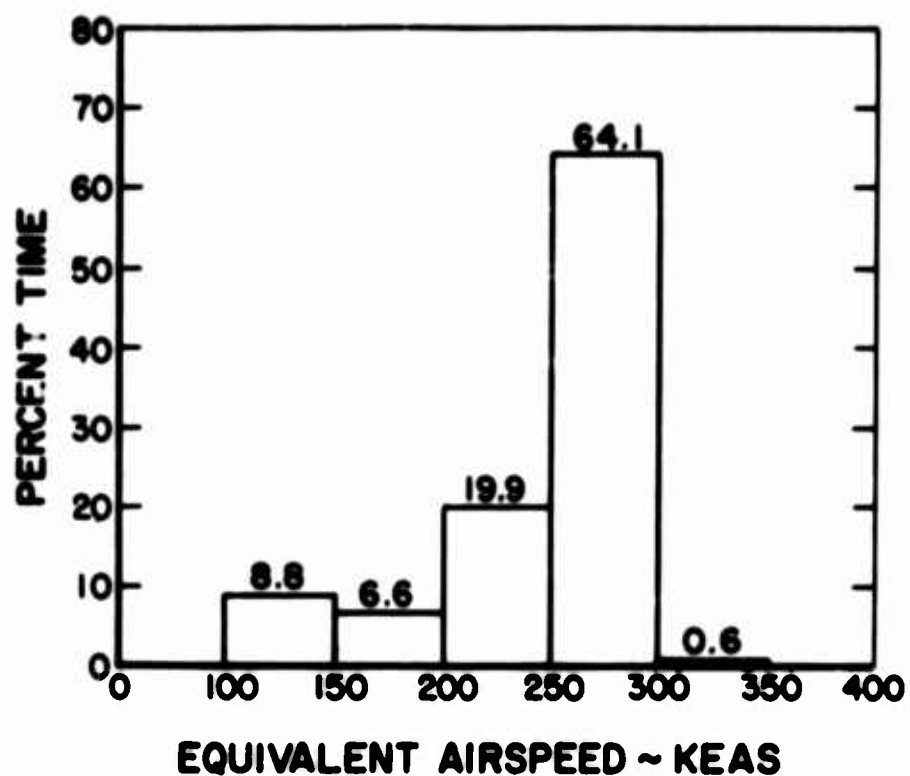


Figure A13 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Logistics Drop Short Range Missions

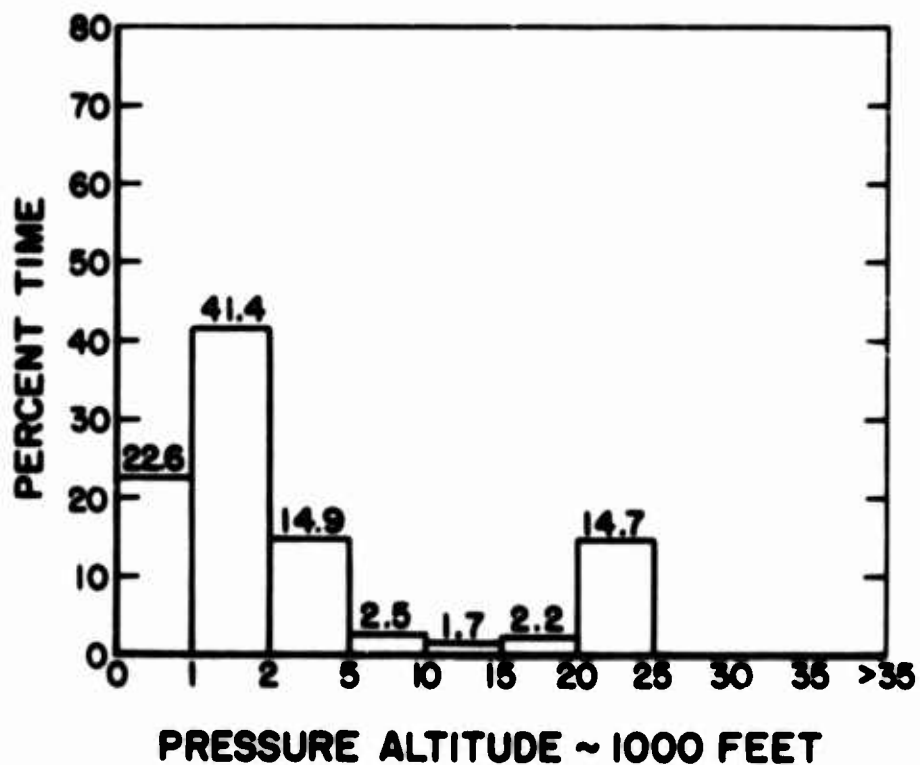
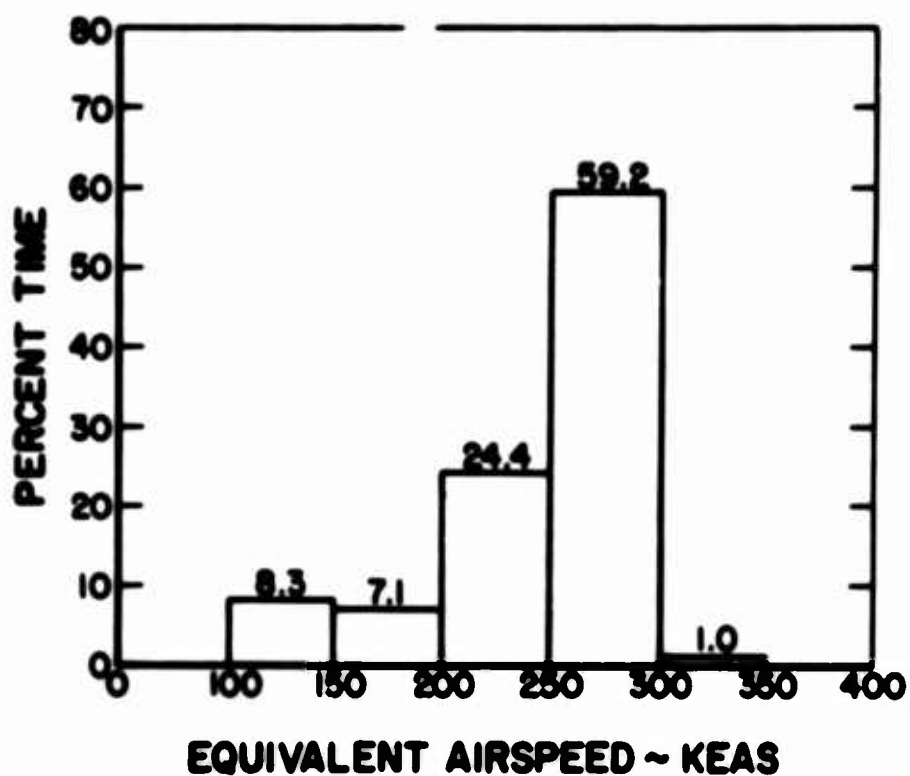
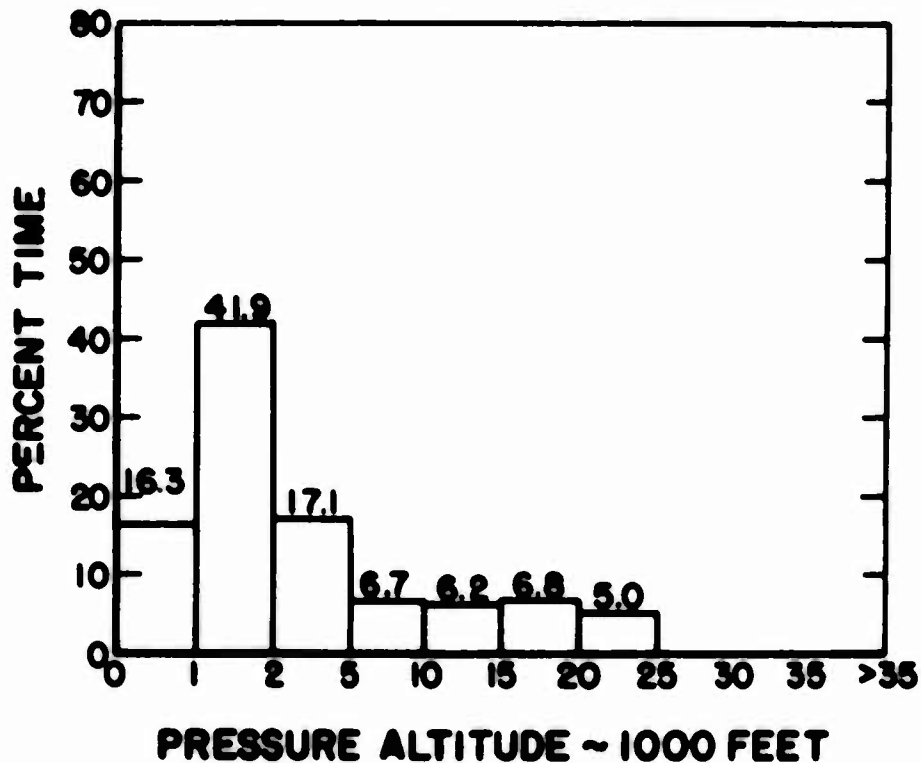


Figure A14 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Logistics Drop Short Range Missions





**Figure A15 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Miscellaneous Missions**



**Figure A16 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Miscellaneous Missions**



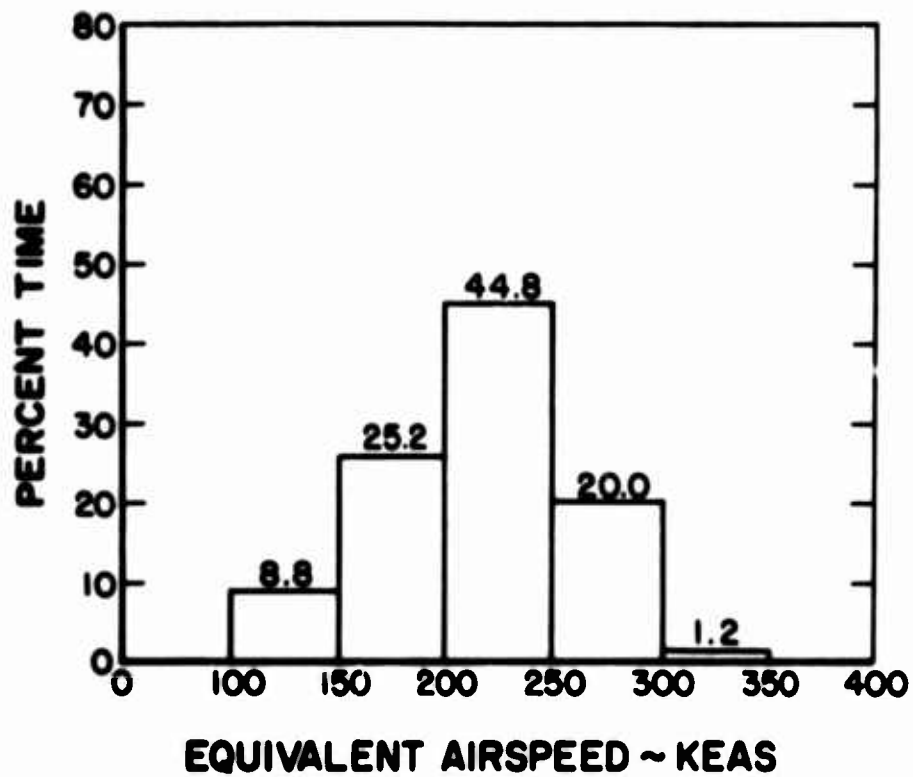


Figure A17 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Flight Test Missions

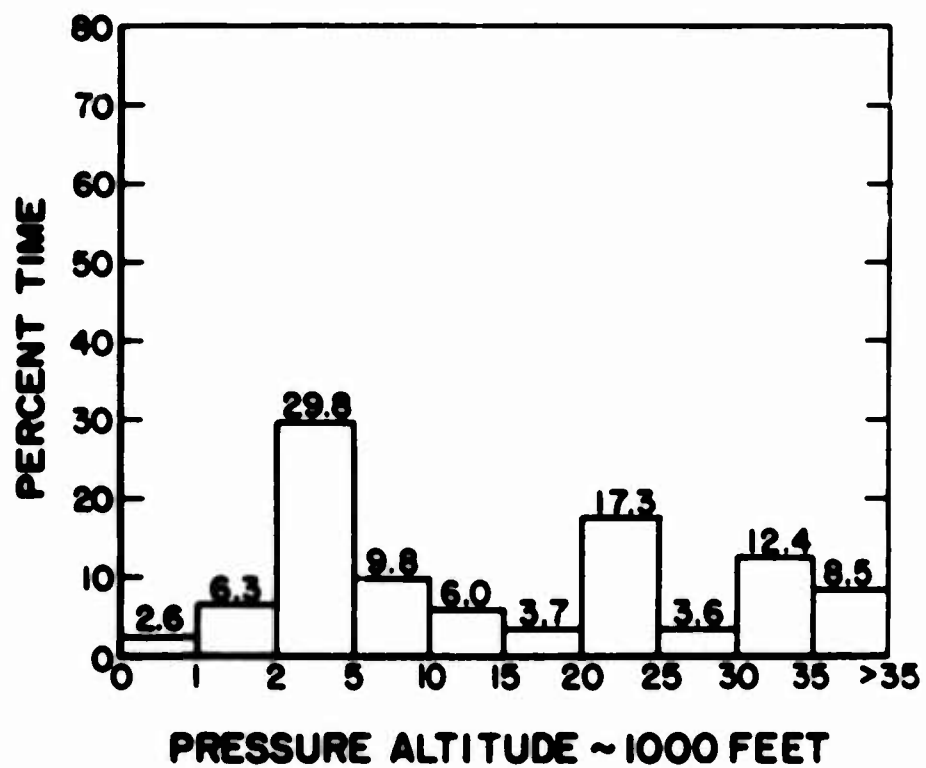


Figure A18 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Flight Test Missions



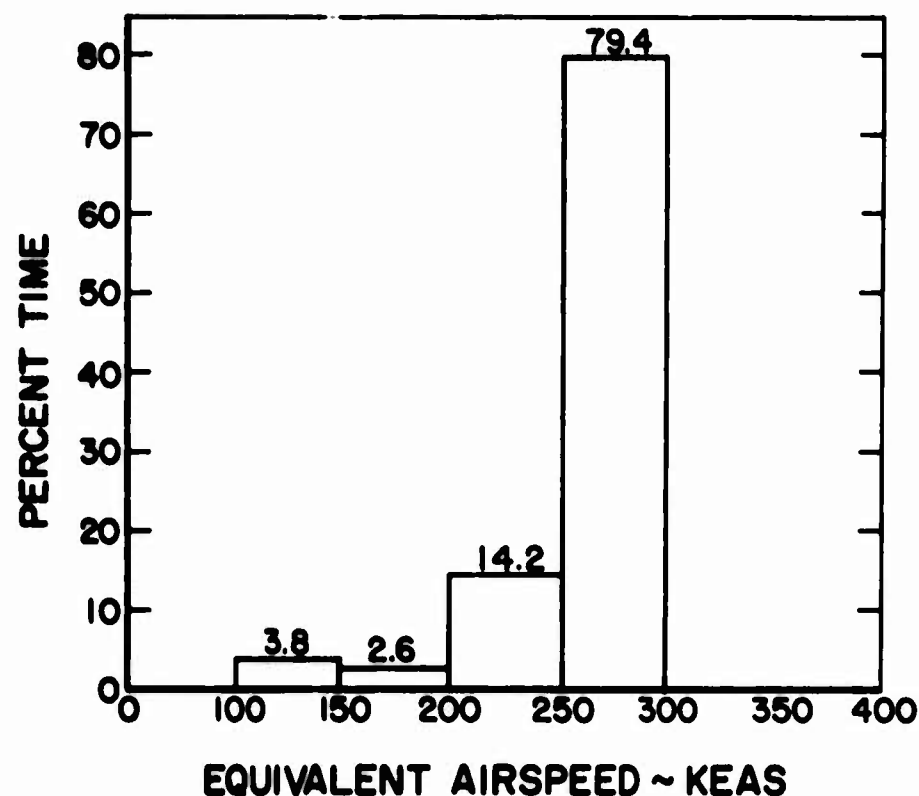


Figure A19 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Airborne Training Missions

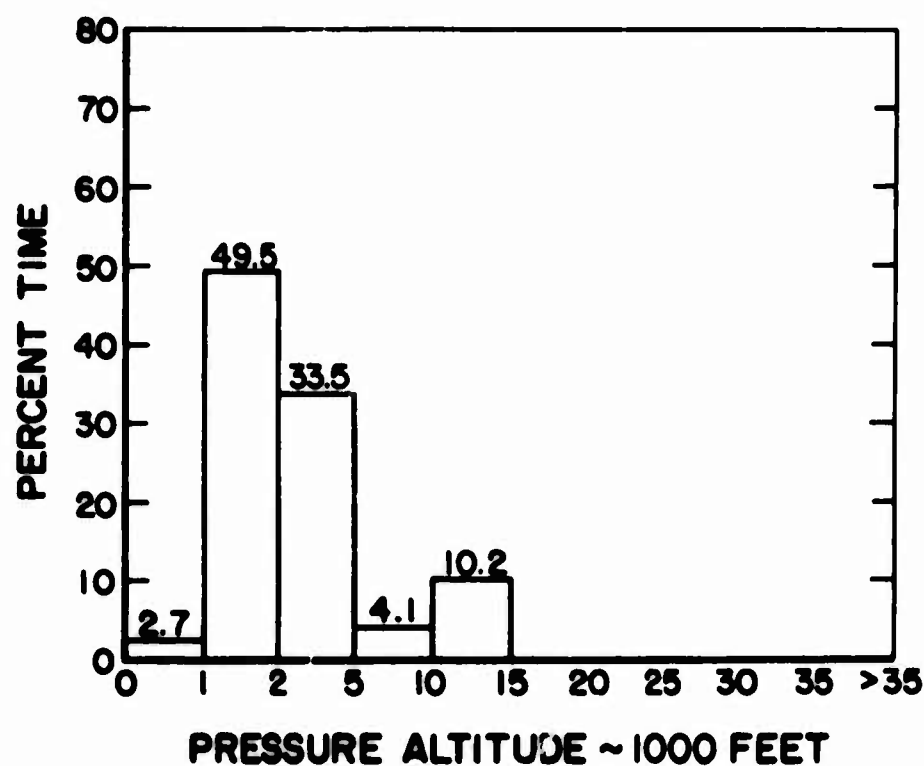


Figure A20 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Airborne Training Missions



TABLE A5  
DISTRIBUTION OF TIME (HOURS)  
BY ALTITUDE AND AIRSPEED INCREMENTS  
FOR THE  
LOGISTICS, MEDIUM RANGE MISSION

AIRSPEED (KIAS)	ALTITUDE (1000 FT.)										TOTAL TIME	PERCENT TIME
	BELOW 1	1 TO 2	2 TO 5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35	ABOVE 35		
BELOW 100	0.06	0.01	0.	0.	0.	0.	0.	0.	0.	0.	0.07	0.33
100 TO 150	11.70	17.07	14.14	1.16	0.01	0.01	0.	0.02	0.07	0.	44.90	1.47
150 TO 200	6.19	13.73	29.09	7.66	1.15	0.59	0.04	0.09	4.02	0.02	64.02	2.12
200 TO 250	0.77	2.78	17.91	15.09	3.83	3.24	3.73	32.34	443.03	1369.62	1094.39	62.02
250 TO 300	0.10	1.27	16.91	39.56	44.09	56.56	96.04	203.03	320.42	56.79	1036.42	33.93
300 TO 350	0.	0.04	1.25	1.29	0.05	1.19	0.76	0.23	0.02	0.	13.50	0.44
350 TO 400	0.	0.	0.00	0.	0.00	0.	0.	0.	0.	0.	0.01	0.00
ABOVE 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	10.01	39.71	79.27	64.60	50.69	61.63	110.20	236.42	969.55	1427.24	3054.20	
PERCENT	0.62	1.17	2.60	2.12	1.66	2.02	3.61	7.74	31.74	46.73		100.00

TABLE A6  
DISTRIBUTION OF TIME (HOURS)  
BY ALTITUDE AND AIRSPEED INCREMENTS  
FOR THE  
LOGISTICS, LONG RANGE MISSION

AIRSPEED (KIAS)	ALTITUDE (1000 FT.)										TOTAL TIME	PERCENT TIME
	BELOW 1	1 TO 2	2 TO 5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35	ABOVE 35		
BELOW 100	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100 TO 150	1.60	1.54	0.04	0.03	0.	0.	0.	0.	0.	0.	4.01	0.00
150 TO 200	0.43	1.12	1.44	0.40	0.19	0.	0.	0.	0.21	0.09	4.60	1.03
200 TO 250	0.10	0.30	1.47	0.99	0.40	0.10	2.32	17.06	69.72	269.00	397.21	70.40
250 TO 300	0.	0.15	1.35	2.01	3.46	4.11	9.79	6.90	50.19	6.16	80.02	19.52
300 TO 350	0.	0.	0.10	0.13	0.07	0.02	0.09	0.	0.	0.	0.41	0.09
350 TO 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ABOVE 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	2.13	3.19	3.21	4.43	4.03	4.32	6.15	24.77	120.11	272.01	455.14	
PERCENT	0.47	0.70	1.14	0.97	0.88	0.95	1.35	5.44	26.15	59.94		100.00

TABLE A7  
DISTRIBUTION OF TIME (HOURS)  
BY ALTITUDE AND AIRSPEED INCREMENTS  
FOR THE  
TRAINING MISSION

AIRSPEED (KIAS)	ALTITUDE (1000 FT.)										TOTAL TIME	PERCENT TIME
	BELOW 1	1 TO 2	2 TO 5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35	ABOVE 35		
BELOW 100	1.64	2.23	9.99	0.01	2.00	0.	0.	0.	0.	0.	4.43	0.16
100 TO 150	100.00	219.70	312.72	2.00	6.09	0.17	3.10	0.	0.13	0.03	640.90	24.20
150 TO 200	32.29	130.24	304.09	30.93	33.31	44.61	70.20	2.40	10.00	6.90	793.37	27.23
200 TO 250	3.99	10.02	142.54	56.19	37.09	120.70	109.09	3.60	25.17	110.56	721.79	26.09
250 TO 300	5.12	9.10	44.20	70.93	07.07	125.03	170.36	36.34	33.14	6.22	602.40	21.77
300 TO 350	0.01	0.10	1.60	3.47	2.01	2.27	3.30	0.36	0.	0.	15.11	0.55
350 TO 400	0.	0.	0.	0.00	0.02	0.02	0.14	0.17	0.	0.	0.35	0.01
ABOVE 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	151.99	370.40	605.74	107.32	100.12	200.07	430.05	43.05	69.24	123.21	2766.96	
PERCENT	5.49	13.71	32.01	6.77	6.00	10.00	15.07	1.56	2.50	4.45		100.00



TABLE 48  
DISTRIBUTION OF TIME (HOURS)  
BY ALTITUDE AND AIRSPEED INCREMENTS  
FOR THE  
LOGISTICS DROP, SHORT RANGE MISSION

AIRSPEED (KNOTS)	COLUMN 1	1 TO 2	2 TO 5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35	ABOVE 35	TOTAL TIME	PERCENT TIME
BELOW 100	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100 TO 150	0.15	0.05	0.	0.	0.	0.	0.	0.	0.	0.	0.05	0.01
150 TO 200	0.11	0.40	0.03	0.	0.	0.	0.	0.	0.	0.	0.62	6.62
200 TO 250	0.20	0.91	0.07	0.	0.	0.01	0.	0.	0.	0.	1.00	19.07
250 TO 300	1.59	1.01	0.06	0.23	0.10	0.00	1.39	0.	0.	0.	6.05	64.06
300 TO 350	0.	0.02	0.00	0.	0.	0.	0.	0.	0.	0.	0.00	0.00
350 TO 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ABOVE 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	2.13	3.91	1.41	0.23	0.10	0.00	1.39	0.	0.	0.	9.44	
PERCENT	22.60	41.40	14.91	2.47	1.00	0.17	14.77	0.	0.	0.		100.00

TABLE 49  
DISTRIBUTION OF TIME (HOURS)  
BY ALTITUDE AND AIRSPEED INCREMENTS  
FOR THE  
MISCELLANEOUS MISSION

AIRSPEED (KNOTS)	COLUMN 1	1 TO 2	2 TO 5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35	ABOVE 35	TOTAL TIME	PERCENT TIME
BELOW 100	0.01	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.01	0.01
100 TO 150	1.06	3.73	0.25	0.	0.	0.	0.	0.	0.	0.	5.04	8.25
150 TO 200	0.40	3.31	0.04	0.	0.	0.	0.	0.	0.	0.	4.36	7.13
200 TO 250	1.36	0.02	3.37	1.02	0.78	0.00	0.10	0.	0.	0.	14.91	26.40
250 TO 300	7.11	10.33	0.01	2.93	3.00	3.00	2.00	0.	0.	0.	30.14	50.13
300 TO 350	0.	0.21	0.13	0.13	0.10	0.07	0.01	0.	0.	0.	0.64	1.03
350 TO 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ABOVE 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	9.95	29.61	10.41	4.00	3.00	4.17	3.07	0.	0.	0.	61.10	
PERCENT	16.20	48.91	17.04	6.54	4.92	6.83	5.03	0.	0.	0.		100.00



TABLE A10  
DISTRIBUTION OF TIME (HOURS)  
BY ALTITUDE AND AIRSPEED INCREMENTS  
FOR THE  
FLIGHT TEST MISSION

AIRSPEED (KIAS)	ALTITUDE (1000 FT.)										TOTAL TIME	PERCENT TIME
	BELOW 1	1 TO 2	2 TO 5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35	ABOVE 35		
BELOW 100	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100 TO 150	0.12	0.16	0.25	0.	0.	0.	0.	0.	0.	0.	0.53	0.80
150 TO 200	0.02	0.15	0.60	0.25	0.10	0.	0.00	0.	0.00	0.14	1.51	25.17
200 TO 250	0.01	0.05	0.65	0.09	0.13	0.10	0.74	0.12	0.45	0.35	2.69	44.84
250 TO 300	0.	0.01	0.20	0.21	0.10	0.12	0.21	0.10	0.22	0.02	1.20	19.90
300 TO 350	0.	0.	0.01	0.03	0.03	0.	0.	0.	0.	0.	0.07	1.22
350 TO 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ABOVE 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	0.15	0.38	1.79	0.59	0.36	0.22	1.04	0.21	0.75	0.51	6.01	
PERCENT	2.50	6.33	29.66	9.77	5.97	3.69	17.29	3.50	12.43	8.52		100.00

TABLE A11  
DISTRIBUTION OF TIME (HOURS)  
BY ALTITUDE AND AIRSPEED INCREMENTS  
FOR THE  
AIRBORNE TRAINING MISSION

AIRSPEED (KIAS)	ALTITUDE (1000 FT.)										TOTAL TIME	PERCENT TIME
	BELOW 1	1 TO 2	2 TO 5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35	ABOVE 35		
BELOW 100	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100 TO 150	0.03	0.02	0.	0.	0.	0.	0.	0.	0.	0.	0.05	3.75
150 TO 200	0.00	0.03	0.	0.	0.	0.	0.	0.	0.	0.	0.04	2.62
200 TO 250	0.00	0.09	0.11	0.	0.	0.	0.	0.	0.	0.	0.21	14.22
250 TO 300	0.	0.57	0.30	0.06	0.15	0.	0.	0.	0.	0.	1.16	79.41
300 TO 350	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
350 TO 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ABOVE 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	0.04	0.72	0.49	0.06	0.15	0.	0.	0.	0.	0.	1.46	
PERCENT	2.73	49.49	33.45	4.10	10.26	0.	0.	0.	0.	0.		100.00



TABLE AII  
 DISTRIBUTION OF AIRCRAFT LOAD FACTORS  
 FOR THE  
 CHARLESTON AREA, JUNE 1966  
 LOGISTICS, RESCUE, AND RECONNAISSANCE MISSION  
 DATA SAMPLE

U-NO-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR DISTRIBUTION (G)									
								0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0	
2 1 2	1.0	0															
2 2 2	4.0	0															
2 2 3	1.0	0															
2 3 2	10.2	1							1								
2 3 3	9.0	0															
2 3 4	1.0	1															
2 3 5	0.4	2															
2 4 4	2.4	2															
2 4 5	2.2	1							1								
2 5 5	9.0	2								2							
2 6 5	4.7	0															
2 7 5	4.0	0															
2 8 5	4.5	0															
2 9 4	1.0	0															
2 9 5	2.0	0															
2 10 4	10.5	0															
2 10 5	20.5	0															
3 1 2	95.3	22							1	20		1					
3 1 3	19.7	3								3							
3 1 4	9.3	2								1		1					
3 2 2	213.0	30					2	0	25	3							
3 2 3	126.2	32						4	34	4							
3 2 4	20.8	14							14								
3 2 5	2.4	6							3	5							
3 3 2	140.3	28						6	20	2							
3 3 3	263.9	107				1		21	76	0		1					
3 3 4	146.1	95					2	20	97	14		2					
3 3 5	64.3	31					1	3	19	0							
3 3 6	7.3	5							3	1		1					
3 4 2	14.2	14							11								
3 4 3	31.6	20						7	17	4							
3 4 4	87.5	47					2	6	26	12		1					
3 4 5	103.0	60				1	1	12	91	17		6					
3 4 6	3.9	1							1								
3 5 3	2.3	0															
3 5 4	14.3	12							7	1		1					
3 5 5	209.3	45					2	13	23	7							
3 5 6	3.3	0															
3 6 4	23.1	3															
3 6 5	234.3	31				1	2	11	30	6						1	
3 6 6	4.1	0															
3 7 3	2.8	8							3								
3 7 4	26.4	41							21	7		3					
3 7 5	425.1	124				1	4	8	30	10		4					
3 7 6	4.0	2							1	1							
3 8 4	16.7	11							4	3							
3 8 5	249.4	40					1	1	23	3		3				1	
3 8 6	1.0	1								1							
3 9 3	1.0	0															
3 9 4	431.0	10				1		1	9	2							
3 9 5	1220.4	49					3	10	28	3		3					
3 10 3	21.2	0															
3 10 4	3310.4	34						1	12	20		3					
3 10 5	190.4	4								4							
4 1 2	64.6	26						1	21	3							
4 1 3	37.0	22						2	10	2							
4 1 4	2.1	3							2	1							
4 1 5	0.1	0															
4 2 2	88.6	13							11	2							
4 2 3	133.4	31					2	21	20	7		1					
4 2 4	19.1	24					2	1	10	3							
4 2 5	4.6	21					1	7	7	4		2					
4 2 6	1.2	0															
4 3 2	43.6	12						1	2	6		2					
4 3 3	220.1	79						1	13	63		2					
4 3 4	140.5	89						6	9	61		10					
4 3 5	73.8	137					2	9	10	60		40					
4 3 6	5.2	11							3	7		1					
4 4 2	3.8	1							1	2		1					
4 4 3	41.9	14							4	6		1					
4 4 4	161.3	72							9	50		7					
4 4 5	239.4	157					1	9	26	73		22					
4 4 6	11.2	10							1	2		7					
4 5 3	0.5	0															
4 5 4	31.2	12							2	9		1					
4 5 5	234.0	31							10	10		3					
4 5 6	5.1	3								4							
4 6 4	13.1	2								1		1					
4 6 5	307.1	29							2	15		4					
4 6 6	14.3	15								12		3					
4 7 3	2.0	0															
4 7 4	30.5	13							5	8							
4 7 5	394.7	37					2	2	10	20		3					
4 7 6	23.0	0															
4 8 3	4.0	3								1							
4 8 4	20.6	23							1	3		5					
4 8 5	1347.8	66							11	46		7					
4 9 3	110.3	27							2	17		4					
4 9 4	2039.5	91							1	10		70					
4 9 5	4447.2	60								10		44					
4 10 3	7.5	0															
4 10 4	11040.2	124					1	5	25	75		13					
4 10 5	275.0	1								1							
5 1 2	20.2	11								10		1					
5 1 3	41.8	23							6	16		1					
5 1 4	0.9	0															
5 2 2	1.1	2								2							
5 2 3	33.7	10							1	5		4					
5 2 4	7.0	3										3					
5 2 5	1.6	2										2					



TABLE A12 continued  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
CHALLENGER AND FORCE ARMS  
LOGISTICS, REGION BARRAGE MISSION  
DATA SAMPLE

U-M-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)													
			-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.5	1.6	2.0	2.5	3.0
5 1 3	31.5	29					2	4	10	1						
5 3 4	34.6	21						2	13	3	1					
5 3 5	57.7	49					2	4	34	9						
5 3 6	2.2	1							1							
5 4 0	4.5	2						1								
5 4 5	122.7	94					2	7	35	11	1					
5 4 6	7.5	17						2	13	2						
5 5 0	2.5	0														
5 5 5	142.0	9						4	5							
5 5 6	7.6	4							3	1						
5 6 4	1.5	0														
5 6 5	191.3	0						2	6							
5 6 6	3.5	2						1		1						
5 7 4	1.0	0														
5 7 5	207.4	7							7							
5 7 6	1.0	0														
5 8 4	10.0	1							1							
5 8 5	954.5	17						3	12	2						
5 9 4	4470.9	64						11	44	0	1					
5 9 5	2927.3	77					1	9	50	7	4					
5 10 4	7031.5	100			1	3	3	14	63	9	7					
5 10 5	457.0	3						1		2						
6 1 2	15.1	5							5							
6 1 3	40.0	25						6	10	1						
6 1 4	3.0	7							2							
6 1 5	0.2	0														
6 2 2	2.0	0														
6 2 3	21.6	10						7	3							
6 2 4	11.9	21						2	12	7						
6 2 5	5.2	5							2	3						
6 3 2	1.6	0														
6 3 3	17.1	10						4	4	2						
6 3 4	32.0	17						1	14	2						
6 3 5	74.6	62					3	19	50	7	1					
6 3 6	3.5	3						2		1						
6 4 3	3.0	1							1							
6 4 4	0.2	0														
6 4 5	133.3	32					1	9	22							
6 4 6	8.7	4							3	1						
6 5 3	0.5	0														
6 5 4	2.0	0														
6 5 5	154.7	16						4	12							
6 5 6	1.5	1							1							
6 6 5	104.9	8						1	7							
6 7 4	1.5	0														
6 7 5	205.4	10						2	7	1						
6 8 4	17.0	1							1							
6 8 5	476.2	21						7	11	5						
6 9 4	904.1	11					1	3	7							
6 9 5	1105.7	7						2	4	1						
6 10 4	309.3	3							2	1						
6 10 5	15.0	0														
TOTAL	52969.0	3000	0	0	5	16	91	362	1935	392	64	3	0	0	0	0



TABLE A13  
DISTRIBUTION OF HANDBY LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
LOGISTICS, LONG RANGE REGION  
DATA SAMPLE

W-10-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.5	1.6	1.8	2.5	3.0
3 1 2	2.2	0														
3 2 2	2.0	2						1	1							
3 3 2	4.2	2						1	1							
3 3 3	3.9	0														
3 3 4	4.9	0														
3 4 4	2.0	0														
3 4 5	4.5	0														
3 5 5	4.5	0														
3 6 5	5.0	0														
3 7 5	6.5	0														
3 8 5	4.0	0														
3 9 4	3.0	0														
3 9 5	1.5	0														
3 10 4	371.0	2						1	1							
4 10 3	3.0	0														
4 10 4	427.0	0														
5 9 4	41.0	0														
5 9 5	209.0	0														
5 10 4	340.2	0														
5 10 5	0.0	0														
6 1 3	0.5	0														
6 2 2	1.0	0														
6 2 3	2.0	2						2								
6 2 4	0.2	0														
6 3 3	1.2	0														
6 3 4	1.9	0														
6 3 5	2.7	3							3							
6 4 5	7.0	0														
6 5 4	0.5	0														
6 5 5	0.2	1						1								
6 6 5	1.0	0														
6 6 6	2.0	0														
6 6 7	0.0	0														
6 7 4	1.0	0														
6 7 5	12.0	0														
6 8 5	15.0	3						1				2				
6 9 4	20.0	0														
6 9 5	70.0	0														
6 10 4	20.0	0														
TOTAL	1042.1	15	0	0	0	0	0	7	0	0	0	2	0	0	0	0



TABLE A14  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

W-M-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
2 1 1	12.2	2							2							
2 1 2	424.5	427					1	11	79	268	1	7				
2 1 3	58.5	121					1	8	29	60	22	1				
2 1 4	1.3	3						2			1					
2 1 5	1.0	4						3								
2 2 1	1.8	0														
2 2 2	651.3	301					1	4	63	197	35	1				
2 2 3	358.3	540					1	17	65	324	103	18				
2 2 4	83.4	105					4	8	9	38	30	16				
2 2 5	4.9	5								4		1				
2 2 6	1.5	1								1						
2 3 1	1.0	0														
2 3 2	258.9	81						2	9	57	12	1				
2 3 3	218.0	146					3	1	28	89	19	6				
2 3 4	53.2	60						2	13	30	14	1				
2 3 5	21.8	35						2	10	16	3	4				
2 3 6	1.6	3							1	2						
2 4 4	12.3	17					1	1	3	6	4	2				
2 4 5	26.3	24						3	6	10	5					
2 4 6	0.6	2								1	1					
2 5 4	9.4	21						7	5	5	1	2			1	
2 5 5	20.4	19						2	5	7	4	1				
2 6 4	8.6	11						2	4	2	2					
2 6 5	19.2	11					1	2	4	3	2	1				
2 6 6	0.2	0														
2 7 3	17.8	10						1	8	6	3					
2 7 4	75.9	115						4	30	48	22	11				
2 7 5	95.0	91						3	12	26	8	2				
2 8 3	3.7	0														
2 8 5	33.3	1								1						
2 9 4	0.5	0														
2 9 5	17.5	0														
2 10 4	99.0	2							2							
2 10 5	0.5	2								2						
3 1 1	0.3	2														
3 1 2	869.4	768					1	12	113	505	117	20				
3 1 3	257.2	418						13	117	200	70	10				
3 1 4	17.1	29						1	6	3	11	6				
3 1 5	58.7	29						1	8	9	5	5			1	
3 2 1	14.4	0														
3 2 2	846.7	320					1	4	76	221	22	4				
3 2 3	1297.6	1211					1	24	210	807	152	17				
3 2 4	140.2	177					2	10	37	78	35	14			1	
3 2 5	166.8	109					1	5	24	52	21	4			2	
3 2 6	0.2	3								1	1	1				
3 3 1	3.7	0														
3 3 2	306.3	79						2	17	53	7					
3 3 3	936.0	561						2	11	104	353	81	10			
3 3 4	324.4	436					1	3	12	44	246	104	23		3	
3 3 5	214.5	279					1	1	11	31	157	56	19		3	
3 3 6	14.5	14							4	7	2	1				
3 4 2	10.5	0														
3 4 3	53.8	22							1	15	3	2			1	
3 4 4	91.0	102						4	29	44	15	8				
3 4 5	196.7	212					2	15	48	93	37	17				
3 4 6	7.1	6							2	2	2					
3 5 2	2.0	0														
3 5 3	7.2	7							3	2	2					
3 5 4	84.0	122						9	36	44	23	10				
3 5 5	194.1	135						2	33	57	33	7			3	
3 5 6	2.9	10							3	2	1	1			2	
3 6 3	51.9	22								15	7					
3 6 4	331.6	416					1	4	20	62	228	79	21		1	
3 6 5	383.3	409					1	1	21	56	195	74	50		11	
3 6 6	3.4	13						3	1	2	3	3			1	
3 7 3	207.1	155						2	1	20	109	18	4		1	
3 7 4	636.5	761						3	17	67	467	151	56			
3 7 5	525.3	409						3	12	44	212	86	42		10	
3 7 6	11.9	3								1	2					
3 8 3	28.2	30					1		2	6	18	3				
3 8 4	47.0	56							4	34	13	5				
3 8 5	203.6	47					1	2	2	14	21	7				
3 9 3	1.0	0														
3 9 4	32.5	11						1	1	6	2	1				
3 9 5	239.3	59							14	27	13	3			2	
3 10 3	0.8	2							2							
3 10 4	397.2	16						1	3	8	3	1				
3 10 5	34.5	2								1	1					
4 1 1	4.1	2								2						
4 1 2	81.2	102							4	89	8	1				
4 1 3	41.9	64						1	14	41	7	1				
4 1 4	2.0	1							1							
4 1 5	0.8	0														
4 2 2	71.5	11							2	8	1					
4 2 3	96.3	94							32	51	11	2				
4 2 4	39.0	59						1	6	35	15	2				
4 2 5	29.1	25						1	5	9	10					
4 2 6	2.1	11					1		1	2	3	4				
4 3 2	68.6	29							4	23	2					
4 3 3	63.1	54						5	19	24	6					
4 3 4	149.8	159						6	15	104	31	3				
4 3 5	97.0	205						4	25	133	29	12			2	
4 3 6	5.9	5								4	1					
4 4 3	2.6	1							1							
4 4 4	13.0	11						1	5	5						
4 4 5	125.1	110						4	20	63	16	6			1	
4 4 6	4.4	13						1	1	7	4					
4 5 3	2.0	0														
4 5 4	22.6	29					1	2	4	14	5	3				
4 5 5	137.8	111					1	2	24	63	10	10			1	



TABLE A14 continued  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

U-WH-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR DISTRIBUTION (G)										
								0.8	1.2	1.3	1.4	1.5	1.6	1.8	2.0	2.5	3.0	
4 5 6	3.9	7							4			3						
4 6 3	27.5	16					2	2	4			10						
4 6 4	157.0	217					2	9	22	106	42	34	4	2				
4 6 5	225.9	200					1	6	22	130	69	30	4	2				
4 6 6	1.7	3									1	1		1				
4 7 2	3.0	1							1									
4 7 3	106.4	120					2	8	96	13	1							
4 7 4	252.6	261					3	24	176	90	29	1						
4 7 5	346.7	293					2	30	163	60	34	4						
4 7 6	0.5	0																
4 8 3	19.0	5								5								
4 8 4	13.0	5								5								
4 8 5	110.1	7						1	4	2								
4 8 6	0.5	0																
4 9 4	24.3	4						3		1								
4 9 5	63.7	3							3									
4 10 4	30.0	14					1	7	9	1								
4 10 5	1.0	2							2									
TOTAL	14320.0	11060	0	0	6	40	340	1955	6003	2012	610	63	9	1	0	0	0	

TABLE A15  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
MISCELLANEOUS MISSION  
DATA SAMPLE

U-WH-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR DISTRIBUTION (G)										
								0.8	1.2	1.3	1.4	1.5	1.6	1.8	2.0	2.5	3.0	
2 1 1	0.7	0																
2 1 2	20.1	10						1	12	5								
2 1 3	5.0	6						3	3									
2 1 4	2.5	3							3									
2 1 5	0.5	1						1										
2 2 2	12.7	3						1										
2 2 3	21.0	31						3	19	6	2	1						
2 2 4	151.1	94					3	8	52	23	7	1						
2 2 5	22.0	33					2	9	10	3	1							
2 2 6	5.9	15						2	9	3	9							
2 3 4	5.5	2							2									
2 3 5	20.3	26							29		1							
2 3 6	2.7	4						2	2									
3 1 2	10.0	2							2									
3 1 3	5.0	1						1										
3 1 4	35.0	0						3	4	1								
3 1 5	256.4	43					2	10	17	10	4							
3 2 2	115.0	6						2	4									
3 2 3	123.0	23						8	11	4								
3 2 4	194.4	67					2	9	30	15	3							
3 2 5	339.9	90				1	4	19	56	7	3							
3 2 6	2.9	1						1										
3 3 2	10.7	0																
3 3 3	20.1	2							1	1								
3 3 4	81.4	36					1	8	26	1								
3 3 5	100.0	61						10	31	10	2							
3 3 6	2.5	1							1									
3 4 4	50.3	9						3	6									
3 4 5	93.1	20						9	13	6								
3 4 6	1.0	3					1	2										
3 5 4	24.0	20						5	10	3	2							
3 5 5	76.0	66				1	4	9	34	19	3							
3 5 6	1.1	1							1									
3 6 4	13.0	12						8	3	1								
3 6 5	116.3	61					3	23	29	8	2							
3 6 6	2.0	1							1									
3 7 4	11.0	4					1	1	3									
3 7 5	75.5	7				1	1	4	1									
3 7 6	0.5	0																
4 1 2	5.5	5							5									
4 1 3	5.3	4						2	1	1								
4 1 4	9.1	10							4	6								
4 1 5	41.3	22						6	9	6	1							
4 2 2	4.2	0																
4 2 3	4.0	0																
4 2 4	10.7	4					3		1									
4 2 5	39.1	30					1	3	19	7								
4 2 6	2.5	5					1	1	2	1								
4 3 4	56.0	10						1	14	2	1							
4 3 5	75.1	16						4	9	3								
4 3 6	1.3	3							3									
4 4 4	11.0	7							6	1								
4 4 5	94.8	6						2	4									
4 4 6	4.0	2						1	1									
4 5 4	17.5	10							13	3	2							
4 5 5	89.4	16						1	9	3	2	1						
4 5 6	4.7	1								1								
4 6 4	0.9	3					1	1	1									
4 6 5	88.4	16					2	4	6	3	1							
4 6 6	1.9	0																
4 7 5	29.0	0							2									
TOTAL	2605.7	991	0	0	0	3	32	204	546	160	43	3	0	0	0	0	0	



TABLE A16  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

B-100-A BLOCK	BLOCK TIME (MIN)	TOTAL POINTS	LOAD FACTOR DISTRIBUTION (%)											
			-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.5	1.6	2.0
3 1 2	1.0	0												
3 2 2	1.0	0												
3 2 3	3.0	1						1						
3 2 4	2.0	3							2	1				
3 3 4	10.0	0												
4 1 2	7.0	10								10	2			
4 1 3	0.7	1								1				
4 1 4	0.2	0												
4 2 2	3.4	11						2	0					
4 2 3	0.2	3					1	2						
4 2 4	0.3	0												
4 2 5	0.0	1												
4 3 3	14.0	13						1	0		3			
4 3 4	0.0	10						1	0		3			
4 3 5	0.0	9						2	1		1	1		
4 3 6	0.1	2												
4 4 3	0.3	1							1					
4 4 4	1.1	0												
4 4 5	0.0	0						2	0		2			
4 4 6	0.0	2							1		0	1		
4 5 3	1.2	3												
4 5 4	0.2	3							1		2			
4 5 5	0.3	2												
4 5 6	7.7	10					2	1	3	3				
TOTAL	74.0	102	0	0	0	0	4	10	33	24	2	1	0	0

TABLE A17  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
AIRBORNE TRAINING MISSION  
DATA SAMPLE

B-100-A BLOCK	BLOCK TIME (MIN)	TOTAL POINTS	LOAD FACTOR DISTRIBUTION (%)											
			-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.5	1.6	2.0
3 1 2	1.0	0												
3 2 2	1.0	0												
3 2 3	2.0	0												
3 2 4	5.0	7							0	1				
3 3 4	10.0	0												
3 3 5	0.7	0												
3 3 6	7.7	7												
3 4 3	3.0	4						2	1	3	1			
3 5 3	9.0	1							1					
4 1 2	0.0	1												
4 1 3	0.0	0												
4 1 4	0.3	0												
4 2 4	0.0	0												
4 2 5	10.0	0												
4 3 3	10.0	0												
TOTAL	67.0	20	0	0	0	0	0	2	12	9	1	0	0	0



CONFIDENTIAL

70



TABLE A20 continued  
DISTRIBUTION OF RECOVERY LOAD FACTORS  
PER TON  
DOWN AND JUMP DATA  
LOGISTICS, DESIGN DATA MISSION  
DATA SAMPLE

DOWN BLOCK	DOWN TIME (HRS)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.5	1.6	2.0	2.5	3.0
0 10 4	10704.3	230					7	34	130	30	7					
0 10 5	609.2	5							4	1						
0 10 6	29.0	30						3	27	9						
0 10 7	22.3	14					1		12	1						
0 10 8	1.0	0														
0 10 9	0.5	0														
0 10 10	12.9	3							3							
0 10 11	64.9	47					2	6	20	7	3					
0 10 12	2.0	9							6	3						
0 10 13	0.5	13						1	10	2						
0 10 14	0.5	1							1							
0 10 15	0.5	0														
0 10 16	70.6	30						12	10		1					
0 10 17	10.0	90					3	0	34	4	1					
0 10 18	61.9	110					4	13	77	10	7					
0 10 19	3.0	11						3	2	0	1					
0 10 20	3.0	0														
0 10 21	4.5	0														
0 10 22	113.2	61					1	11	40	0	1					
0 10 23	0.1	10					1	0	0	3	1					
0 10 24	7.0	0														
0 10 25	0.5	0														
0 10 26	123.1	0						2	4							
0 10 27	1.7	1									1					
0 10 28	2.5	0														
0 10 29	1.4	0														
0 10 30	191.4	16					1	0	10	4	3					
0 10 31	1.2	1							1							
0 10 32	1.0	1														
0 10 33	1.0	1							1							
0 10 34	274.1	10						3	10	2	1					
0 10 35	119.3	6														
0 10 36	753.3	30						12	16	2						
0 10 37	0.0	0														
0 10 38	3277.7	60					2	11	66	0	1					
0 10 39	1000.0	70					1	14	30	0						
0 10 40	1.5	6														
0 10 41	9196.7	111						20	97	13	2					
0 10 42	773.0	6						1	4	1						
0 10 43	1.2	0							6							
0 10 44	15.0	0							3							
0 10 45	90.5	31						3	20							
0 10 46	0.0	5						1	4							
0 10 47	0.4	0														
0 10 48	1.5	0														
0 10 49	2.2	0														
0 10 50	20.0	5						4	1							
0 10 51	10.0	11						1	0	1						
0 10 52	0.0	0							7	1						
0 10 53	0.0	0						2	3							
0 10 54	15.7	5						2	3							
0 10 55	39.1	17						3	12	2						
0 10 56	190.0	87					2	17	96	12						
0 10 57	24.0	13						3	9		1					
0 10 58	0.0	0														
0 10 59	0.0	0														
0 10 60	140.0	17				1		3	32	1						
0 10 61	0.2	0						1	7							
0 10 62	1.0	0														
0 10 63	200.0	23						2	22	1						
0 10 64	0.0	0														
0 10 65	1.5	0														
0 10 66	1.5	0														
0 10 67	403.1	11						2	0		1					
0 10 68	3.0	0														
0 10 69	707.2	11						1	0	2						
0 10 70	1.5	0														
0 10 71	7.5	0														
0 10 72	990.7	10					1	2	14	1						
0 10 73	327.3	0						4	9							
0 10 74	630.3	34						0	27	1						
0 10 75	1111.5	24					2	1	10	2						
0 10 76	70.0	0														
TOTAL	92002.0	1476	0	0	2	0	70	677	2711	400	77	0	0	0	0	0



TABLE A19  
DISTRIBUTION OF PARADOX LOAD FACTORS  
FOR THE  
DOWN AND UPWARD BASE  
TENSURE REGION  
DATA SAMPLE

W-NO-4 BLOCK	BLOCK TIME (MIN)	TOTAL POINTS	-0.5 0.0 0.5 0.6 0.7	LOAD FACTOR 0.0 1.2 1.5 1.6 1.8 1.9 2.0 2.5 3.0
2 1 1	1.0	0		
2 1 2	170.1	100		
2 1 3	37.3	00	1 3 2	31 134 10 2
2 1 4	0.3	1		10 52 10 2
2 1 5	0.2	0		1
2 2 2	201.0	100		
2 2 3	137.0	100	1 0 1	30 130 17 3
2 2 4	30.2	70	1 1	42 110 29 3
2 2 5	3.6	3		7 30 10 7 1
2 2 6	0.5	2		3 2
2 2 7	62.7	44		2 2
2 2 8	81.7	100	1 1 3	10 29 3 1
2 2 9	49.5	100	1 1 3	14 90 25 0
2 2 10	17.4	0	1	9 99 27 0
2 3 4	0.3	0		5
2 3 5	4.0	1		1
2 3 6	21.5	3		3
2 3 7	1.0	0		
2 3 8	14.3	9		3 4 1 1
2 3 9	20.0	13	1	11 1 1
2 3 10	19.1	2		1 1
2 3 11	0.3	0		
2 3 12	62.0	0		2 2
2 3 13	1.0	0		
2 3 14	1.5	0		
2 3 15	42.0	0		
2 3 16	4.0	1		1
2 3 17	4.0	0		
2 3 18	7.0	0		
2 3 19	0.3	3		4
2 3 20	1705.0	1700	1 3 20	171 1301 201 20
2 3 21	170.3	1002	3 20	170 702 140 22
2 3 22	20.3	03	1	13 30 10 1
2 3 23	0.2	0		
2 3 24	1299.4	702	1 7	139 494 62 3
2 3 25	1016.0	1015	1 3 20	204 1274 262 42
2 3 26	140.0	091	1 2 14	40 200 90 30 2
2 3 27	12.4	00	2	0 17 10 3
2 3 28	242.3	200	1 2	34 141 20 3
2 3 29	1215.4	1204	3 20	212 1072 234 45
2 3 30	42.4	091	2 4 10	100 404 204 45
2 3 31	117.0	202	1 1 9	31 131 61 42 5 1
2 3 32	1.4	25	1	2 16 4 2
2 3 33	2.6	0		
2 3 34	30.7	7		1 5 1
2 3 35	82.1	06	1 3	17 33 10 3 1
2 3 36	174.0	212	1 12	30 127 20 4
2 3 37	0.6	10		3 7 3 2 1
2 3 38	0.2	2		
2 3 39	214.7	140	5	20 00 20 2
2 3 40	617.0	602	2 14 75	454 70 36 3 1
2 3 41	201.0	200	10	00 203 00 40 3 1
2 3 42	2.0	0		
2 3 43	45.7	30		0 21 0 1
2 3 44	290.3	200	1 4	17 175 63 35 4 1
2 3 45	240.3	210	11	20 143 03 47 7
2 3 46	0.6	10		1 7 3
2 3 47	21.7	31	1	2 21 7
2 3 48	102.0	204	1 5	22 130 54 30 2
2 3 49	209.0	191	2	24 97 30 25 4 1
2 3 50	1.0	2		2
2 3 51	7.0	2		2
2 3 52	120.1	94	2	9 37 5 1
2 3 53	69.0	33	5	10 14 1 3
2 3 54	206.7	23	1	5 14 1 1 1
2 3 55	12.2	3		3
2 3 56	1340.1	44	1	1 30 3 1
2 3 57	22.0	0		
2 3 58	0.4	1		
2 3 59	95.0	104		15 147 10 3
2 3 60	33.0	00	1 1 5	10 53 0 1
2 3 61	1.5	0		
2 3 62	3.0	7		1 5 1
2 3 63	32.2	12	1	1 10
2 3 64	102.4	171	1 0	41 112 0 3
2 3 65	20.0	27		1 25 1
2 3 66	5.1	4		1 2
2 3 67	14.0	0		
2 3 68	140.0	122	3	27 00 20 3
2 3 69	120.2	217	2 7	40 102 00 11
2 3 70	91.2	207	1 4 17	47 134 00 22
2 3 71	7.0	22		3 14 5
2 3 72	3.0	2		2
2 3 73	21.1	37	1	0 20 3
2 3 74	105.1	145	4	40 00 23 0
2 3 75	3.0	1		1 2 1
2 3 76	17.0	10		4 11 2 1
2 3 77	90.0	100	1 3 5	16 100 21 13
2 3 78	170.2	207	10	20 114 20 11 1
2 3 79	1.7	2		
2 3 80	20.7	20		2 22 3 2 1
2 3 81	100.2	90	2	7 37 5 0
2 3 82	1.0	0		
2 3 83	0.0	2	1	1
2 3 84	23.7	40	1	4 24 0 0
2 3 85	127.0	140	1 1	10 01 20 10
2 3 86	3.0	11		11
2 3 87	127.0	30	3	3 14 1 1
2 3 88	91.5	0	2	5 5 1
2 3 89	297.7	20	1	4 0 3 1



TABLE A19 concluded  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

W-MH-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)													
			-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
4 10 4	2275.4	52						10	30	3	1					
4 10 5	21.0	0														
5 1 2	5.8	3							3							
5 1 3	7.2	7						1	6							
5 2 3	6.2	7						5	2							
5 2 4	1.6	6							5	1						
5 3 4	1.2	8						2	3	2	1					
5 3 5	1.7	3					1	1	1							
5 3 6	5.6	10						1	8	1						
5 3 7	28.6	29					3	7	17	2						
5 3 8	1.5	3						1	1		1					
5 4 5	36.3	25					2	4	15							
5 4 6	2.5	4							3	1						
5 5 5	11.0	1							1							
5 5 6	6.8	0														
5 6 5	80.3	12						3	4	1						
5 7 5	50.7	0														
5 8 4	1.0	0														
5 8 5	41.2	7					1	2	3	1						
5 9 4	155.0	8				1	1	3	3							
5 9 5	393.4	22					2	6	8	5	1					
5 10 4	932.9	27					1	4	20	1	1					
5 10 5	246.4	7							5	2						
6 1 2	0.5	0														
6 1 3	6.4	0														
6 2 3	6.6	0														
6 3 3	0.2	0														
6 3 4	6.8	0														
6 3 5	0.6	0														
6 3 6	1.0	0														
TOTAL	18825.4	15901	0	0	11	49	155	2140	4683	2751	660	46	6	0	0	0

TABLE A20  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
LOGISTICS DROP, SHORT RANGE MISSION  
DATA SAMPLE

W-MH-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)													
			-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
3 1 2	8.4	4						2	3		1					
3 1 3	9.7	5							4	1						
3 1 4	17.8	3					1	1	1							
3 1 5	95.1	16					1	4	7	3	1					
3 2 2	40.8	7						1	1							
3 2 3	27.0	4							3	1						
3 2 4	54.9	14							12	2						
3 2 5	107.6	7					1	1	5							
3 2 6	1.0	1							1							
3 3 3	2.0	0														
3 3 4	34.2	18						1	16	1						
3 3 5	22.3	13						1	9	2	1					
3 3 6	1.7	0														
3 4 5	1.5	0														
3 5 5	1.5	0														
3 6 5	1.5	1						1								
3 7 5	9.0	2					1		1							
4 1 2	0.7	1							1							
4 1 3	1.5	1						1	1	1						
4 1 4	1.2	1						1								
4 1 5	0.6	2							2							
4 2 5	1.9	2							1	1						
4 3 4	2.0	1														
4 3 5	17.3	17					1	1	14	1						
4 3 6	1.0	0														
4 4 5	12.5	3						1	2							
4 5 5	8.0	1							1							
4 6 4	0.5	0														
4 6 5	10.3	6						1	4	1						
4 7 5	74.7	5						1	2							
TOTAL	566.7	131	0	0	0	1	4	18	91	14	3	0	0	0	0	0



TABLE A21  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
MISCELLANEOUS MISSION  
DATA SAMPLE

W-WH-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
2 1 2	1.5	4							4							
2 1 3	0.6	10					1	7	2							
2 1 4	0.3	2							2							
2 2 2	1.9	4							3	1						
2 2 3	4.0	4						1	3							
2 2 4	6.4	28						5	14	6	3					
2 2 5	2.5	16						1	9	4	2					
2 3 3	3.1	21						1	17	2	1					
2 3 4	17.5	70					1	13	41	11	3	1				
2 3 5	0.5	0														
3 1 2	17.4	3						1	2							
3 1 3	6.1	0														
3 1 4	32.6	29					1	6	12	9	1					
3 1 5	128.3	69					2	18	41	6	2					
3 2 2	49.0	20						2	15	3						
3 2 3	45.6	38						11	27							
3 2 4	112.2	114			1	3	6	24	60	10	10					
3 2 5	212.5	123					10	26	64	17	6					
3 2 6	1.0	0														
3 3 2	4.4	3							3							
3 3 3	15.4	4						1	3							
3 3 4	31.2	32					2	5	20	4	1					
3 3 5	43.6	42				2	3	10	20	6	1					
3 3 6	0.5	5						2	2	1						
3 4 5	9.2	5						2	2	1						
3 5 5	3.5	1						1								
3 6 5	4.0	4						1								
3 7 5	17.5	12					1	6	3	2						
4 1 2	0.4	2							2							
4 1 3	1.4	3					1		2							
4 1 4	1.2	2						2								
4 1 5	0.4	0														
4 2 2	0.3	0														
4 2 3	0.2	0														
4 2 4	0.7	3					1	1	1							
4 2 5	5.0	14							9	2	2	1				
4 3 4	12.5	1							1							
4 3 5	35.4	63						16	34	10	1					
4 3 6	1.0	1							1							
4 4 5	18.6	5						3	2							
4 4 6	1.0	0														
4 5 5	11.0	3						1	2							
4 6 5	31.1	6						2	6							
4 7 5	50.9	3					2	1								
TOTAL	980.3	771	0	0	1	5	31	171	433	95	39	2	0	0	0	0

TABLE A22  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

W-WH-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
3 1 2	1.4	0														
3 2 2	2.0	2						2								
3 2 3	2.0	0														
3 3 3	4.1	2						1	1							
3 3 4	0.5	3							2	1						
3 3 5	0.6	2							1		1					
3 4 5	0.8	4							3	1						
3 5 5	1.0	3							3	2	1					
3 6 5	2.1	5							3	2						
3 7 5	3.0	3							3							
3 8 5	4.7	3					1	1	1							
3 9 5	17.0	31							10	7	6					
4 1 2	0.5	3							2	1						
4 1 3	0.3	0														
4 2 3	0.2	0														
4 3 3	0.3	2						2								
4 3 4	0.5	1						1								
4 3 5	0.4	3							2	1						
4 4 5	1.2	1							1							
4 5 5	1.4	0														
4 6 5	0.4	0														
TOTAL	30.6	68	0	0	0	1	1	6	37	19	8	0	0	0	0	0



TABLE A23  
DISTRIBUTION OF HANGOVER LOAD FACTORS  
FOR THE  
TINIAN AIR FORCE BASE  
LOGISTICS, MEDICAL, AND COMMUNICATIONS  
DATA SAMPLE

U-NO-A BLOCK	BLOCK TIME (HRS)	TIME PERIOD	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR DISTRIBUTION (%)										
								0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0		
2	1	2	4.2	1					1									
2	2	2	23.8	5				1	4									
2	2	3	4.0	2				1	1									
2	3	2	57.0	3					2	1								
2	3	3	42.4	19				2	14	3								
2	3	4	20.1	30				1	22	12	1							
2	3	5	2.0	1				1										
2	3	6	1.5	1				1										
2	4	3	4.0	0														
2	4	4	7.0	4				1										
2	4	5	9.2	3				2		1								
2	4	6	0.5	3					1	1	1							
2	5	4	0.6	3					1	1	1							
2	5	5	7.0	3				1										
2	5	7	5.2	4														
2	6	3	2.5	4				1		1								
2	6	4	9.0	4				1		1								
2	6	5	6.5	3				1		1								
2	6	6	1.0	2				1	1									
2	7	5	24.5	0														
2	8	5	24.0	0														
2	9	5	7.0	0														
3	1	2	17.9	10				2	9	2								
3	1	3	3.2	3				1	1		1							
3	1	4	1.0	0														
3	1	5	0.5	0														
3	2	2	34.4	31				1	4	23	3							
3	2	3	11.1	15				0	7	2								
3	2	4	1.0	0														
3	2	5	1.2	1														
3	3	2	72.9	11				3	6	1								
3	3	3	127.3	90				10	70	2								
3	3	4	30.0	44				0	20	9								
3	3	5	13.4	15				2	10	1	2							
3	4	2	6.0	0														
3	4	3	6.9	5														
3	4	4	26.5	14				3	7	1								
3	4	5	38.0	17				1	2	11	2	1						
3	5	3	10.5	0														
3	5	4	12.0	14				3	9	2								
3	5	5	33.3	14				4	0	2								
3	5	6	2.3	1														
3	6	3	6.2	0														
3	6	4	10.0	0														
3	6	5	67.9	7				1	4	2								
3	6	6	10.0	1														
3	7	4	14.0	1														
3	7	5	170.7	29				1	12	13	1	1	2					
3	7	6	43.7	7					1									
3	8	3	33.0	11						11								
3	8	4	3.5	0														
3	8	5	294.6	21						13								
3	8	6	1.0	0														
3	9	4	23.0	4						4								
3	9	5	143.5	0				1	1	3		2						
3	10	4	99.5	0														
4	1	2	2.3	1						1								
4	1	3	0.0	1														
4	1	4	5.2	0														
4	2	2	8.2	4														
4	2	3	3.5	2				1	2	1								
4	2	4	1.0	1														
4	3	2	16.9	3														
4	3	3	13.0	3														
4	3	4	0.5	0														
4	3	5	0.0	10														
4	4	2	4.0	1														
4	4	3	6.0	20														
4	4	4	35.4	9				1	2	10	7	1						
4	4	5	90.9	4														
4	5	4	11.5	1														
4	5	5	32.7	4														
4	5	6	1.5	2														
4	6	4	2.0	2														
4	6	5	24.0	3				2	1									
4	6	6	1.0	0				1	1									
4	7	5	50.7	5														
4	7	6	2.5	0														
4	8	5	152.3	9														
4	8	6	0.5	0														
4	9	3	107.5	3														
4	10	4	40.0	0														
5	2	2	0.5	1						1								
5	3	3	0.3	0														
5	3	4	0.7	0														
5	3	5	0.3	0														
5	3	6	0.7	2														
5	4	5	1.3	0														
5	4	6	2.3	0														
5	4	7	9.0	0														
5	5	5	2.0	0														
5	5	6	7.5	0														
5	5	7	4.0	0														
5	9	3	137.0	2														
5	10	4	95.0	2				1	1									
5	10	5	40.0	0														
6	1	2	0.5	0														
6	1	3	0.5	0														
6	2	3	0.5	0														
6	3	3	0.3	0														
6	3	4	0.7	0														
6	3	5	1.5	0														
6	3	6	2.5	0														
6	4	5	2.5	0														
6	4	6	3.5	0														
6	7	5	3.5	0														
6	8	5	1.0	0														
TOTAL			2671.3	613	0	0	0	2	14	111	300	79	21	2	0	0	0	0



TABLE A34  
DISTRIBUTION OF HANDOVER LOAD FACTORS  
FOR THE  
TUNING AIR FORCE BASE  
THROUGHOUT MISSION  
DATA SAMPLE

U-NO-A BLOCK		BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)												
				-0.5	0.0	0.5	0.6	0.7	0.8	1.0	1.5	1.6	1.8	2.0	2.5	3.0
2	1	1	14.0	1						1						
2	1	2	207.3	300			1	8	91	234	99	8				
2	1	3	26.7	39					6	24	4	1				
2	1	4	0.4	0												
2	2	1	71.3	2												
2	2	2	2226.7	1004					291	1297	230	30		1		
2	2	3	201.0	720			1	9	30	192	400	89	18			
2	2	4	19.4	67			1	1	2	8	39	19	5			
2	2	5	0.6	3							2	1				
2	3	1	19.0	9							3					
2	3	2	0473.0	4121				10	92	760	2722	471	66			
2	3	3	3520.0	4087			4	20	161	867	2929	764	129		3	
2	3	4	1123.4	2003				23	81	314	1330	904	244	17	1	
2	3	5	104.3	595			3	6	19	61	247	144	100	12	3	
2	3	6	30.1	32			1			3	13	9	4	2		
2	4	1	0.3	0												
2	4	2	179.1	221				1	7	67	116	25	5			
2	4	3	427.3	534			1	4	20	122	275	89	23			
2	4	4	014.9	1093			4	8	44	191	930	232	100			
2	4	5	004.9	1195			3	15	82	219	495	232	95	15		
2	4	6	00.3	67			1			16	30	8	3			
2	5	2	02.3	22						7	13	2				
2	5	3	339.0	150					4	30	101	18	5			
2	5	4	495.0	635				13	30	164	265	102	40	3		
2	5	5	720.7	419				2	9	39	195	374	124	69	7	2
2	5	6	54.3	42			1		4	8	13	7	5	2	1	1
2	6	2	67.4	10					1	3	6					
2	6	3	956.7	431			2	1	22	87	245	57	16	1		
2	6	4	1277.6	1376			4	14	68	267	682	231	90	12		
2	6	5	1200.2	1101				29	87	267	467	139	75	19	6	
2	6	6	70.0	67					3	13	33	5	5	1	2	5
2	7	2	30.2	23					1	5	14	3				
2	7	3	906.4	904				7	20	99	292	69	17			
2	7	4	1496.3	1661			3	10	42	164	911	303	182	41	4	1
2	7	5	1499.6	977			5	6	53	242	412	143	97	17	2	
2	7	6	74.1	40					2	7	17	8	5		1	
2	8	3	3.0	5					1	2	2					
2	8	4	10.0	12					1	2	5	3	1			
2	8	5	199.3	84				1	6	10	34	13	10		2	
2	8	6	117.9	91			2		1	7	79	5	1			
2	9	4	60.0	60			5	2	5	10	34	7	5			
2	9	5	11.9	25				3	4	1	11	4	1	1		
2	10	2	1.0	0												
2	10	3	61.3	53					9	34	5	1				
2	10	4	30.4	55			1	2	5	7	21	13	4	2		
3	1	1	10.5	3							3					
3	1	2	792.0	905					1	9	77	717	93	8		
3	1	3	115.4	103					2	32	95	30	3	1		
3	1	4	0.2	0												
3	2	1	44.0	0						1	5					
3	2	2	4209.1	3292				2	49	390	2300	413	42			
3	2	3	1377.3	2074			4	5	73	350	1307	200	45	2		
3	2	4	71.4	109					3	22	117	43	10			
3	2	5	3.0	31					3	4	11	7	4	1	1	
3	2	6	0.4	0												
3	3	1	9.2	2							2					
3	3	2	9109.4	4605			2	6	93	880	3070	400	50			
3	3	3	10744.0	11611			4	32	309	1950	7306	1665	232	4	1	
3	3	4	2033.5	9034			4	19	120	570	3529	1195	378	10	1	
3	3	5	423.0	1313			2	12	54	140	650	290	140	7		
3	3	6	26.7	74					2	11	33	22	8			
3	4	2	390.4	278					6	63	160	37	4			
3	4	3	1122.0	878				1	30	101	514	110	33	1		
3	4	4	1426.3	2322			1	8	75	261	1320	442	103	12		
3	4	5	1417.9	2012			5	9	74	303	1094	365	144	18		
3	4	6	64.5	79					1	6	37	20	11			
3	5	1	0.2	0												
3	5	2	264.2	44					14	27	2					
3	5	3	1139.3	420					6	89	249	63	20	1		
3	5	4	1200.1	1417			1	9	50	740	697	244	135	24	1	
3	5	5	1095.9	2191			2	20	60	344	1041	305	234	36	4	1
3	5	6	77.2	160			1	4	8	23	55	41	20	4	4	
3	5	7	1.1	0												
3	6	2	174.0	67					1	4	99	3				
3	6	3	1344.3	689			1	11	25	104	441	90	14	1		
3	6	4	3049.7	3570			13	24	116	346	1049	903	355	67	5	
3	6	5	2040.0	3405			9	33	149	461	1472	672	502	88	14	3
3	6	6	74.4	148			1	1	11	22	40	33	20	11	5	4
3	6	7	1.5	6							4		1			
3	7	2	240.4	100						9	87	12				
3	7	3	2324.3	1646					10	20	192	1172	209	33	2	
3	7	4	5004.1	6503			9	32	120	504	3549	1149	507	114	10	1
3	7	5	4934.9	3746			8	24	117	478	1874	644	454	117	20	3
3	7	6	62.0	91					1	5	20	21	14	4	2	4
3	7	7	0.3	10						3	12	2	1			
3	8	3	64.9	23			1	3	1	2	11	3	2			
3	8	4	82.4	95					5	10	55	19	6			
3	8	5	690.0	268			2	1	21	50	113	41	26	12	1	1
3	8	6	30.0	24					1	5	10	3	4	1		
3	8	7	10.0	4						2	2					
3	9	2	0.0	0												
3	9	3	449.2	305			2	2	6	36	137	26	4			
3	9	4	313.9	295			3	10	12	31	126	41	26	6		
3	9	5	105.9	115			6	5	8	10	57	15	8	5		1
3	10	2	1.0	0												
3	10	3	309.3	131			2	3	4	17	77	22	6			
3	10	4	417.4	424			2	8	17	51	196	75	65	10		
3	10	5	30.5	42						3	26	11	2			
4	1	2	109.1	162					1	15	120	22	4			
4	1	3	95.0	85				1	2	11	59	12				



TABLE A34 continued  
DISTRIBUTION OF AIRBORNE LOAD FACTORS  
FOR THE  
TUNING AND POWER DATA  
VALUES DESIGN  
DATA SAMPLE

U-10-A BLOCK	CLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.5	1.6	2.0	2.5	3.0
4 1 4	0.4	2							1	1						
4 2 1	0.3	0														
4 2 2	240.0	440					0	113	441	85	2					
4 2 3	497.1	895					0	195	510	150	22			2		
4 2 4	74.9	185				3	2	17	120	33	4					
4 2 5	0.2	5				1			4							
4 3 2	880.0	424				3	10	147	340	55	5					
4 3 3	2021.0	3036				11	64	632	2424	426	70				1	
4 3 4	951.3	1616				9	32	177	1037	274	60				1	
4 3 5	143.0	345				5	11	41	180	64	36				6	
4 3 6	0.1	7						2	3							
4 4 2	20.0	11							10	1						
4 4 3	431.1	340					9	44	240	90	9			1		
4 4 4	207.4	262				1	4	30	195	53	16			2		
4 4 5	543.4	340				2	22	112	292	95	37			6		
4 4 6	0.5	14				1			11	1	1					
4 5 2	13.3	2						1	1							
4 5 3	151.0	33					2	5	10	5	2					
4 5 4	243.0	244				1	11	32	120	41	43			10		
4 5 5	642.0	430				2	4	13	334	125	54			14		
4 5 6	10.0	26					1	2	0	6	7			1		
4 6 2	26.0	0						2	2							
4 6 3	134.2	87				1	4	12	57	11	2					
4 6 4	200.5	610				1	9	13	71	209	127			12		
4 6 5	1000.0	827				2	1	23	121	422	147			22		
4 6 6	10.5	27				1		1	4	12	4			2		
4 7 2	5.0	2							2							
4 7 3	104.0	172				2	1	6	13	22	3					
4 7 4	844.3	440				4	5	10	75	406	200			121		
4 7 5	1914.0	1040				1	4	21	160	534	191			107		
4 7 6	26.0	20					1	6	4					3		
4 8 3	12.4	3							3							
4 8 4	19.4	11				1			4		1			2		
4 8 5	134.5	19					1	7	0	2				1		
4 8 6	1.0	0														
4 9 3	32.4	11				2	1	1	4	1						
4 9 4	14.0	24							15	4	3			1		
4 9 5	100.0	16					2	2	11	1						
4 10 4	34.5	6					1	1	3	1						
5 1 2	20.4	0							1	7						
5 1 3	10.7	0							3							
5 2 2	40.9	53							7	39	6			1		
5 2 3	92.2	71					1	10	51	0	1					
5 2 4	14.0	10							2	7	1					
5 3 2	85.1	53							16	39	3					
5 3 3	497.6	346					2	62	274	53	6					
5 3 4	170.6	247					3	20	163	45	0					
5 3 5	40.5	85					1	5	54	14	7					
5 4 3	54.0	20							24	3						
5 4 4	72.2	66					2	7	39	17	1					
5 4 5	164.5	133							20	81	25			7		
5 4 6	3.0	6							3	2	1					
5 5 3	20.3	14							4	0	1					
5 5 4	71.4	64					2	14	50	14	11			3		
5 5 5	100.9	130				1	7	20	70	22	0			2		
5 5 6	4.1	11				1	1	2	3	1	2			1		
5 6 2	2.0	4							4							
5 6 3	79.0	39					1	7	30	1						
5 6 4	204.0	295					1	12	149	45	30			10		
5 6 5	310.0	304					3	17	137	53	20			10		
5 6 6	0.0	24					1	2	11	2	5			2		
5 7 3	222.1	110					1	1	14	00	11			1		
5 7 4	617.2	612				1	2	12	327	115	95			10		
5 7 5	701.1	423				1	1	3	204	60	61			17		
5 7 6	10.0	6							1							
5 8 4	15.4	5							2		2			1		
5 8 5	23.9	30					2	1	7	0	5			3		
5 8 6	0.2	0														
5 9 3	0.1	2					1		1							
5 9 4	40.4	30					2		10	0	4					
5 9 5	10.2	11							2					1		
5 10 4	29.7	20					1		0		2			1		
5 10 5	14.5	2							2		1					
TOTAL	104642.4	105720	0	1	166	570	3004	15002	41302	17136	6500	936	120	30	1	0



TABLE A25  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
TINER AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

H-HH-A BLU-A	BLU-A TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR C.0	1.2	DISTRIBUTION (G)								1.3	1.4	1.6	1.8	2.0	2.5	3.0
3 2 2	1.6	0																						
3 3 2	11.7	4						1	3															
3 3 3	14.0	3					1	2	2															
3 1 4	4.0	0						2	3	1														
3 1 5	0.5	1							1															
3 3 0	0.5	1							1															
3 4 3	0.5	1							1															
3 4 4	1.0	1							1															
3 4 5	0.5	0																						
3 4 0	1.5	4						1	1	1	1													
3 5 4	1.5	0																						
3 5 5	0.2	0																						
3 5 0	1.5	2						1	1															
3 6 4	3.5	0																						
3 6 5	2.3	1							1															
3 7 3	3.8	0																						
3 7 4	10.1	26						0	0	9	1													
3 7 5	9.9	12							9	1	2													
3 8 4	0.5	0																						
3 8 5	2.2	4					1		2		1													
3 9 3	5.0	1							1															
3 9 4	20.0	17						1	15	1														
3 9 5	1.0	0																						
3 10 3	0.5	6							6															
3 10 4	21.2	6							1	5														
3 10 5	1.0	0																						
4 2 2	0.8	2						1	1															
4 2 3	0.4	1							1															
4 2 4	0.3	2							2															
4 3 3	0.5	3						3																
4 3 4	1.4	0																						
4 4 3	2.0	0																						
4 4 4	1.2	0																						
4 4 5	1.4	7					1	1	2	1	1													
4 5 3	4.0	0																						
4 5 4	0.5	4					1		1	2														
4 5 5	2.0	0																						
4 6 4	2.0	0																						
4 7 3	1.0	0																						
4 7 4	20.5	19						3	15	1														
4 8 4	0.5	0																						
Total	211.3	136	0	0	0	2	1	24	79	22	6	0	0	0	0	0	0	0	0	0	0			



**TABLE 2-20**  
**DISTRIBUTION OF MANEUVER LOAD FACTORS**  
**FOR THE**  
**TRANSIT AIR FORCE BASE**  
**LOGISTICS, MEDIUM RANGE MISSION**  
**DATA SAMPLE**

N-101-A		BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)												
BLOCK				-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5
2	1	2	13.9	0												
2	1	3	2.2	0												
2	2	1	0.2	0												
2	2	2	19.3	0												
2	2	3	5.8	2												
2	3	2	22.6	1						1						
2	3	3	17.9	4					1		1					
2	3	4	14.5	2						2						
2	3	5	2.0	8												
2	4	2	2.0	2						2						
2	4	3	2.9	2					2							
2	4	4	13.8	5					1		4					
2	4	5	24.2	1							1					
2	5	3	2.0	0												
2	5	4	0.9	0												
2	5	5	16.3	1							1					
2	5	6	8.4	1							1					
2	6	3	1.5	0												
2	6	5	13.1	2					1		1					
2	6	6	2.0	0												
2	7	3	5.5	0												
2	7	4	4.5	0												
2	7	5	14.4	0												
2	7	6	7.8	1							1					
2	8	4	1.5	0												
2	8	5	63.0	1												
2	8	6	3.0	0							1					
2	9	4	7.5	0												
2	9	5	15.8	0												
2	10	4	81.5	0												
2	10	5	14.2	0												
3	1	2	119.7	17					4		6	4	3			
3	1	3	13.3	9							9					
3	1	4	0.2	0												
3	1	5	0.6	2												
3	2	2	248.6	28					5		22	1				
3	2	3	75.9	37					6		24	5	2			
3	2	4	11.4	21					3		14	4				
3	2	5	3.1	2							1	1				
3	3	2	198.6	33					4		25	4				
3	3	3	389.5	81				1	17		50	4				
3	3	4	191.8	79					3		63	10	3			
3	3	5	75.5	38					2		22	9	5			
3	3	6	3.4	9					2		2	2	5			
3	4	2	16.4	3					2		1					
3	4	3	123.0	41					5		28	7	1			
3	4	4	189.7	64				1	9		45	6	3			
3	4	5	249.6	61					6		44	8	3			
3	4	6	11.7	6					2		4	3	1			
3	5	3	11.7	7					1		4	1	1			
3	5	4	39.3	10					4		6					
3	5	5	290.6	43					4		34	2	1			
3	5	6	0.8	0												
3	6	3	4.3	10					4		4	2				
3	6	6	44.2	15				1	2		2	3				
3	6	5	353.1	24					13		7	5	1			
3	6	6	10.0	1							1					
3	7	3	21.2	12				1	1		3	3	1			
3	7	4	42.8	6					2		4					
3	7	5	543.7	60					4		9	39	6	2		
3	7	6	161.6	6							2	3	1			
3	8	3	5.5	0												
3	8	4	34.4	1							1					
3	8	5	1017.6	41				2	7		27	4	1			
3	8	6	5.0	0												
3	9	2	4.0	0												
3	9	3	130.0	0												
3	9	4	1832.1	28					12		14	1				
3	9	5	1637.5	65				1	9	3	16	17	12	10	1	
3	10	3	2.7	0												
3	10	4	5445.6	53					2		15	32	4			
3	10	5	125.3	6												
4	1	1	0.4	2								1				
4	1	2	72.5	31							1	28	2			
4	1	3	15.8	11							4	6	1			
4	1	4	6.2	4							2	1				
4	1	5	1.4	4												
4	2	2	109.9	9				1			4		3			
4	2	3	81.7	28							4		1			
4	2	4	9.3	19							3		3			
4	2	5	9.1	22							15		3			
4	3	2	86.1	8					1		2	7	9	2		
4	3	3	203.0	79							2		6			
4	3	4	98.6	91					1		1	20	31	7		
4	3	5	85.8	144							7	62	18	2		
4	3	6	3.4	9					1		14	22	20	10	1	
4	4	2	7.0	5							7	2				
4	4	3	76.2	25							3	1	1			
4	4	4	123.9	45							6	19				
4	4	5	242.0	115							9	30	9	1		
4	4	6	6.2	2							24	60	26	5		
4	5	2	0.3	0								1	1			
4	5	3	18.4	2							1		1			
4	5	4	28.9	8							1		6	1		
4	5	5	331.4	54							9	37	8			
4	5	6	2.5	2							1		1			
4	6	3	8.5	1								1				
4	6	4	15.5	2							2					
4	6	5	545.2	26					1		9	13	3			
4	6	6	1.5	0												



TABLE A34 continued  
 DISTRIBUTION OF PARADOX LOAD FACTORS  
 FOR THE  
 TRAVIS AIR FORCE BASE  
 LOGISTICS, GROUND RANGE MISSION  
 DATA SAMPLE

U-MH-A BLOCK		BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (6)														
				-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0	
4	7	3	9.0	0														
4	7	4	31.4	2														
4	7	5	724.8	33				1	2	11	31	0						
4	7	6	270.0	12						1	10	1						
4	8	2	1.5	0														
4	8	3	4.5	0														
4	8	4	433.6	12						3	7							
4	8	5	2751.7	94					3	17	20	5	1					
4	8	6	2.0	0														
4	9	4	9404.9	159				2	0	64	72	12	1					
4	9	5	5021.1	45					3	12	26	3	1					
4	10	3	6.0	0														
4	10	4	14976.6	60			1	1	5	19	43	12	6		1			
4	10	5	202.7	2						1	1							
5	1	1	0.4	0														
5	1	2	49.4	13							12	1						
5	1	3	52.1	33					2	4	21	2						
5	1	4	0.9	12							10	1	1					
5	1	5	0.9	4							4							
5	2	2	11.9	1						1								
5	2	3	37.9	29				1	10	16	2							
5	2	4	23.9	40					3	20	6	3						
5	2	5	21.9	48					3	33	11	1						
5	2	6	0.5	0														
5	3	2	14.6	7					2	3	1	1						
5	3	3	63.4	42					1	10	26	4	1					
5	3	4	42.1	46			2	1	6	33	2	2						
5	3	5	134.3	179				4	20	115	25	7						
5	3	6	3.4	1					1									
5	4	2	1.2	4					1	3								
5	4	3	63.7	10					4	9	5							
5	4	4	25.1	9					1	0								
5	4	5	203.5	132				3	17	96	15	1						
5	4	6	4.7	5						3	2							
5	5	4	0.5	10					1	7	2							
5	5	5	337.1	54			1	2	9	31	8	3						
5	5	6	3.8	4					2	1	1							
5	6	4	12.0	5					3	2								
5	6	5	460.2	17					2	13	2							
5	6	6	1.7	0														
5	7	4	14.5	11					1	6	4							
5	7	5	734.8	23					3	15	5							
5	7	6	0.5	0														
5	8	3	1.0	0														
5	8	4	937.0	47					11	34	2							
5	8	5	1514.9	43			1	1	12	10	6	2						
5	9	4	3714.0	41					15	19	6							
5	9	5	4936.1	37			1		9	19	2	2	2					
5	10	4	9031.5	60			4	2	5	20	17	0	2		2			
5	10	5	252.0	0														
6	1	2	30.4	4						4								
6	1	3	41.7	16					2	14								
6	1	4	9.0	3					1	2								
6	1	5	1.1	1						1								
6	2	2	2.4	1						1								
6	2	3	25.7	13					4	9	1	1						
6	2	4	15.5	5						3								
6	2	5	11.2	15					1	12	2							
6	3	2	2.0	0														
6	3	3	17.9	6					2	3	1							
6	3	4	27.7	16						12	4							
6	3	5	100.4	92				3	10	65	9	3	2					
6	3	6	4.2	1						1								
6	4	3	20.5	0														
6	4	4	40.9	5					1	3	1							
6	4	5	185.8	42					7	21	0	4						
6	4	6	2.3	1						1								
6	5	4	3.3	0														
6	5	5	202.2	10				1	3	6								
6	5	6	4.0	0														
6	6	4	4.5	0														
6	6	5	256.0	5						4	1							
6	6	6	2.0	0														
6	7	4	6.0	0														
6	7	5	392.0	2						2								
6	7	6	1.0	0														
6	8	4	55.5	0														
6	8	5	490.0	3						3								
6	9	4	213.2	2					1	1								
6	9	5	973.3	7					3	3	1							
6	10	4	761.9	4				2	1	2	1							
6	10	5	37.5	0														
TOTAL			74737.2	3370	0	0	10	17	75	648	2074	432	107	4	3	0	0	0



TABLE A17  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
TRANSALPINE FORCE BASE  
LOGISTICS, LONG RANGE MISSION  
DATA SAMPLE

D-M-A BLUCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)											
			-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.5	1.6	2.0
2 1 2	2.1	0												
2 2 2	1.5	0												
2 2 3	1.5	0												
2 3 2	2.0	1							1					
2 3 3	1.0	0												
2 4 2	1.5	0												
2 4 3	3.0	0												
2 4 4	0.0	2							2					
2 5 4	1.7	0												
2 6 3	1.5	0												
2 6 5	1.5	0												
2 7 4	0.5	1						1	2	2				
2 7 5	0.5	2						2						
3 1 2	70.7	5							4					
3 1 3	3.0	6						4	1	1				
3 2 2	90.2	6						3	2	1				
3 2 3	90.7	32						2	20	3	1			
3 2 4	19.7	11							7	3				
3 3 2	40.2	3					1		2					
3 3 3	71.4	25						5	16	2				
3 3 4	71.3	19						4	12	3				
3 3 5	10.0	5					1		5	2				
3 3 6	0.0	0												
3 4 2	1.5	1							1					
3 4 3	21.3	1							1					
3 4 4	50.1	2						1	1					
3 4 5	62.9	5						1	4					
3 4 6	1.4	0												
3 5 3	9.3	1						1						
3 5 4	22.2	1							1					
3 5 5	75.0	4							4					
3 5 6	5.1	0												
3 6 4	9.7	2							2					
3 6 5	61.4	4							4					
3 6 6	0.5	0												
3 7 4	10.0	1						1						
3 7 5	90.7	4						1	3					
3 8 4	127.2	0												
3 8 5	74.3	0							5					
3 8 6	0.4	0												
3 9 3	504.2	4					1	2			1			
3 9 4	201.4	1							1					
3 10 3	32.0	0												
3 10 4	2674.0	30						12	17	1				
3 10 5	20.0	1						1						
4 0 4	209.7	1							1					
4 0 5	12.0	0												
4 0 6	1233.3	1							1					
4 0 7	101.0	3							3					
4 1 1	10.0	0												
4 1 4	6040.0	37						10	21	4	2			
4 10 5	107.0	0												
5 3 3	0.5	0												
5 4 3	3.0	1							1					
5 5 3	3.0	0												
5 6 4	4.3	0												
5 7 4	23.0	0												
5 8 4	504.0	0												
5 8 5	75.3	1						1						
5 9 4	2093.7	10					2	1	4	1				
5 9 5	1021.9	10					1	4	0	3				
5 10 4	4701.3	92					7	25	43	12	1			
5 10 5	197.1	1							1					
6 1 2	15.0	2							2					
6 1 3	21.4	14						6	0					
6 1 4	5.0	1							1					
6 2 2	1.5	0												
6 2 3	0.0	6						1	3	2				
6 2 4	7.1	2						1	1					
6 2 5	4.0	6					1		4	1				
6 3 3	0.2	0							6	2				
6 3 4	10.1	2						2						
6 3 5	62.0	20					1	5	10	4				
6 3 6	9.5	9						4	5					
6 4 3	4.3	0												
6 4 4	9.6	0												
6 4 5	91.3	19							10	1				
6 4 6	0.0	2							2					
6 5 4	1.0	0												
6 5 5	112.2	9						3	5	1				
6 6 3	146.3	1							1					
6 6 4	1.0	1							1					
6 7 3	203.2	5							5					
6 7 4	5.5	0												
6 8 4	61.3	0												
6 8 5	268.3	9						1	5	2	1			
6 9 4	299.6	3						2	1					
6 9 5	866.7	57					1	5	10	6	1			
6 10 4	526.3	3							2	1				
6 10 5	37.0	0												
TOTAL	25466.4	533	0	0	3	2	21	126	316	98	7	0	0	0



TABLE A-2  
DISTRIBUTION OF RAMPUP LOAD FACTORS  
FOR THE  
TRAVIS AIR FORCE BASE  
TRUCKING DIVISION  
DATA SAMPLE

U-100-A BLOCK	BLOCK TIME (MIN)	TOTAL PAGES	LOAD FACTOR DISTRIBUTION (%)											
			-0.0	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0
2	1	14.6	0											
2	1	209.1	209						27	209	24	1		
2	1	121.6	121						2	20	107	23	1	
2	1	19.4	19						1	6	9	2	1	
2	1	31.9	34						2	9	9	4		
2	1	0.6	1							1				
2	2	0.2	0											
2	2	704.0	223						3	34	171	19		
2	2	337.4	200						3	30	324	29	3	1
2	2	84.0	114						1	19	67	22	10	1
2	2	97.3	47						3	9	24	6	5	
2	2	0.7	6							1	1	3	1	
2	3	300.2	100							10	77	12	1	
2	3	420.9	100							22	144	13	3	
2	3	322.3	204							30	191	21	11	1
2	3	99.9	114							19	99	27	6	
2	3	0.9	2								1			
2	4	1.4	0											
2	4	12.2	19							2	4	5	2	
2	4	31.1	62							6	39	14	3	
2	4	45.0	21							1	16	4		
2	4	0.5	1								1			
2	4	24.7	35							1	10	8	3	
2	5	41.0	39							8	19	9	2	1
2	5	7.0	0											
2	6	3.0	0											
2	6	22.5	10							1	9	2	7	
2	6	89.0	121							32	34	20	7	
2	6	34.9	51							9	27	12	5	1
2	7	37.4	22							3	17	2		
2	7	86.5	92							19	30	9	2	
2	7	31.0	8							6	3	1		
2	8	67.0	0											
2	8	0.0	0											
3	1	14.0	1											
3	1	1909.0	697							9	70	470	60	0
3	1	644.0	914							10	65	335	70	10
3	1	152.0	134							2	10	75	43	4
3	1	204.9	117							12	17	60	24	4
3	2	1.7	0											
3	2	2026.9	449								61	353	40	3
3	2	1362.0	1116							1	19	113	600	163
3	2	291.2	300								4	33	227	87
3	2	227.4	104								19	100	40	19
3	2	0.7	1								1			
3	3	0.3	0											
3	3	866.7	164								2			
3	3	2149.3	993								1	13	119	657
3	3	1674.6	1469								3	23	192	1023
3	3	967.7	939								7	20	149	920
3	3	16.3	21										14	4
3	4	19.2	4										2	1
3	4	162.3	44										32	2
3	4	379.7	311								2	11	59	179
3	4	800.1	476								2	12	109	262
3	4	11.7	9										6	1
3	5	20.5	6										2	4
3	5	83.3	45										31	2
3	5	402.0	517										3	12
3	5	607.2	709										5	29
3	5	4.7	5										113	311
3	6	0.0	7											177
3	6	307.0	247										1	1
3	6	1133.6	1206										3	3
3	6	690.4	672										1	1
3	6	0.5	26										103	315
3	7	11.0	1										1	6
3	7	460.0	320										4	27
3	7	1063.0	813										3	16
3	7	441.7	277										2	10
3	7	0.9	4										31	150
3	8	9.3	4											3
3	8	14.0	13										1	3
3	8	313.1	27										3	9
3	9	0.7	0										11	4
3	9	109.4	1											2
3	9	150.3	12											5
4	1	300.7	10											2
4	1	0.0	1											4
4	1	91.0	102											2
4	1	79.0	93											6
4	1	22.1	0											37
4	1	4.5	0											3
4	2	73.7	22											1
4	2	90.4	83											11
4	2	40.0	43											62
4	2	32.4	47											4
4	2	29.0	8											29
4	3	171.2	117											1
4	3	210.0	244											17
4	3	230.4	363											26
4	3	2.7	13											10
4	4	21.4	4											97
4	4	82.1	39											1
4	4	202.0	111											2
4	4	3.4	1											20
4	4	0.2	0											7
4	5	12.6	0											16
4	5	19.0	2											60
4	5	40.0	37											19



TABLE 220 continued  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
TRAVERS AND FORCE BASE  
FLIGHT TEST REGION  
DATA SAMPLE

U-100-A BLUCK	BLUCK TIME (min)	TOTAL PERMS	LOAD FACTOR DISTRIBUTION (%)														
			-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.5	1.6	1.7	2.0	2.5	3.0
4 3 3	105.2	62					1	3	8	29	15	6					
4 3 6	2.4	11						1		4	3	3					
4 6 2	16.5	1								1							
4 6 3	26.6	10					1		6		1						
4 6 4	66.6	110					1	3	6	26	20	21	7				
4 6 5	171.0	92					2		12	34	29	10	1				
4 6 6	3.0	0															
4 7 3	10.0	13								12	1						
4 7 4	79.5	107						3		34	20	39	13				
4 7 5	262.3	66					1	7	12	36	9	4					
4 7 6	2.0	0								1							
4 8 3	7.0	1									1						
4 8 4	7.0	3								3							
4 8 5	60.5	11					2			7	2						
4 9 4	296.3	0															
4 9 5	133.0	1								1							
4 10 4	920.0	16					1	2		7							
4 10 5	3.0	0															
5 1 1	0.3	0															
5 1 2	34.9	2								2							
5 1 3	41.2	7							3	4							
5 1 4	2.3	5								4	1						
5 2 2	10.5	1								1							
5 2 3	7.9	1								1							
5 2 4	0.1	0								4	2						
5 2 5	0.6	0															
5 3 2	6.5	0															
5 3 3	13.1	3								3							
5 3 4	19.2	0								7	1						
5 3 5	3.6	2							1	1							
5 3 6	0.5	2								1	1						
5 4 3	1.0	0															
5 4 4	7.9	1							1								
5 4 5	11.9	4							2		2						
5 5 4	0.3	2									2						
5 5 5	2.3	0															
5 5 6	13.5	5							2	2	1						
5 6 3	0.2	0															
5 6 4	10.0	5							2	1	2						
5 6 5	16.2	6							1	4	1						
5 7 3	31.1	2							1	1							
5 8 5	22.0	0															
5 8 6	0.2	1									1						
5 9 3	10.0	0															
5 9 4	216.7	0															
5 9 5	127.0	3							1	2							
5 10 4	100.0	0															
5 10 5	2.0	0															
6 1 2	3.1	0															
6 1 3	3.4	0															
6 1 4	1.2	0															
6 1 5	0.2	0															
6 2 2	1.0	0															
6 2 3	3.4	0															
6 2 4	0.3	0															
6 2 5	0.6	0															
6 3 3	3.3	0															
6 3 4	7.5	2								2							
6 3 5	0.3	5								5							
6 4 4	0.5	0															
6 4 5	0.5	4								4							
6 5 5	0.5	0															
6 6 3	0.5	0															
6 7 5	0.5	0															
6 8 2	12.5	0															
6 9 4	0.2	0															
6 9 5	63.0	0															
TOTAL	26222.6	17275	0	0	21	56	300	2206	10637	2749	900	122	13	1	0	0	0

TABLE 221  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
TRAVERS AND FORCE BASE  
FLIGHT TEST REGION  
DATA SAMPLE

U-100-A BLUCK	BLUCK TIME (MIN)	TOTAL PERMS	LOAD FACTOR DISTRIBUTION (%)													
			-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9
4 1 2	1.4	1									1					
4 1 3	0.5	0														
4 1 4	0.5	2									2					
4 2 2	1.0	0														
4 2 3	1.5	5							1	4						
4 2 4	0.3	0														
4 3 2	3.1	0														
4 3 3	7.9	12							2	10						
4 3 4	14.7	4								4						
4 3 5	1.0	3								3						
4 4 4	2.0	0														
TOTAL	35.9	29	0	0	0	0	0	0	3	26	0	0	0	0	0	0



TABLE A30  
DISTRIBUTION OF GUST LOAD FACTORS  
PER TON  
CHARLESTON AIR FORCE BASE  
LOGISTICS, SUPPORT RANGE MISSION  
DATA SAMPLE

U-100-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAK	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR 0.8	DISTRIBUTION (1)	1.1	1.2	1.3	1.4	1.5	1.6	2.0	2.5	3.0
2 1 2	1.0	0							2	2								
2 2 2	4.0	0																
2 3 2	1.0	0																
2 3 3	10.2	0																
2 3 3	9.6	0																
2 3 4	1.0	0																
2 3 5	0.4	0																
2 4 4	2.4	0								3	1							
2 4 4	2.2	1								1								
2 5 5	1.0	2							2									
2 6 5	0.7	3								2			1					
2 7 5	0.0	2							1	1								
2 8 5	0.5	2							1	1								
2 9 4	1.0	0																
2 9 5	2.0	0																
2 10 4	1.5	0																
2 10 5	20.5	0																
3 1 2	95.3	173							60	110	3							
3 1 3	10.7	34							16	17	1							
3 1 4	5.3	4							1	2	1							
3 2 2	213.0	361							130	216	9							
3 2 3	174.2	170							64	91	12							
3 2 4	20.0	30							11	22	3	1						
3 2 5	2.4	35							12	10	3							
3 3 2	140.3	213							60	110	2							
3 3 3	205.0	434					1	12	167	232	19	3						
3 3 4	140.1	390					3	13	134	164	29	3						
3 3 5	64.5	91						2	35	45	6	3						
3 3 6	7.3	3							1	2								
3 4 2	14.2	92							35	93	4							
3 4 3	31.4	124							4	96	55	7						
3 4 4	87.5	250					2	21	60	124	30	7	1					
3 4 4	103.0	347						10	117	197	19	4						
3 4 6	3.0	5							5									
3 5 3	2.5	0																
3 5 4	34.3	73							32	34	2							
3 5 5	203.0	402					2	17	190	287	23	1						
3 5 6	3.5	14							5	0	1							
3 6 4	25.1	37							15	17	2							
3 6 5	254.3	204					2	11	106	137	10	2	3	1				
3 6 6	0.1	24						2	7	12	3							
3 7 3	2.0	0							3	3								
3 7 4	25.4	124							13	30	21	3	2					
3 7 5	425.1	1504					4	26	124	500	695	105	40	11	3			
3 7 6	4.0	1							1									
3 8 4	10.7	92							0	14	24	3						
3 8 5	140.4	301						4	22	120	104	20	5	5				
3 8 6	1.0	0																
3 9 3	1.0	0																
3 9 4	651.0	1220					2	1	57	320	704	101	16	6				
3 9 5	1220.4	990						2	23	391	922	43	0	1				
3 10 3	21.2	4								2								
3 10 4	3330.4	1113					1	3	21	394	605	64	1					
3 10 5	190.4	90							1	42	51	2	2					
4 1 2	64.6	114								30	81	2	1					
4 1 3	37.0	100							7	30	83	21						
4 1 4	2.1	27								5	14	2						
4 1 5	0.1	0					1		3	5								
4 2 2	20.6	124								42	76	2						
4 2 3	133.4	130								40	74	7						
4 2 4	10.1	103							1	30	40	15	7	1				
4 2 5	0.6	29							3	7	14	3	2					
4 2 6	1.2	1									1							
4 3 2	43.6	84							2	32	46	4						
4 3 3	220.1	304							2	13	114	100	15	2				
4 3 4	140.5	432							4	23	167	106	52	10				
4 3 5	73.8	323							3	16	90	144	47	10	3			
4 3 6	5.2	14								5	7	2						
4 4 2	3.0	35								7	25	3						
4 4 3	41.0	70								10	35	0	2	1				
4 4 4	161.3	393								12	144	100	33	9	2			
4 4 5	230.4	614					2		3	20	200	209	61	19	4			
4 4 6	11.2	11								2	5	2	2					
4 5 3	0.5	0																
4 5 4	31.2	31								11	17	1						
4 5 5	254.0	203								13	91	103	19	1				
4 5 6	5.1	3									3							
4 6 4	13.1	32								16	13	3						
4 6 5	207.1	252					1		5	100	131	14	1					
4 6 6	14.3	10								3	7							
4 7 3	2.0	0																
4 7 4	30.5	63								6	16	30	2	1				
4 7 5	904.7	311								10	64	104	19	2	2			
4 7 6	23.0	14									13							
4 8 3	4.0	0									4							
4 8 4	20.4	61								3	20	33	4	1				
4 8 5	1547.0	1111					2	1	93	344	544	122	10	5				
4 8 6	110.5	90								31	54							
4 9 4	2030.5	651								11	200	404	32	4				
4 9 5	4447.2	1544					1	3	0	40	570	822	80	14	2			
4 10 3	7.5	0																
4 10 4	11040.2	2522					1	4	30	904	1401	74	0	2				
4 10 5	275.6	124								1	45	75	3					
5 1 2	20.2	61									12	44						
5 1 3	41.3	105								2	30	110	14	1				
5 1 4	0.9	6									3							
5 2 2	1.1	12									3							
5 2 3	33.7	90								2	16	36	3	1				
5 2 4	7.0	4									3							
5 2 5	1.6	4																



TABLE A30 concluded  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
LOGISTICS, MEDIUM RANGE MISSION  
DATA SAMPLE

W-M-A BLOCK	BLUCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
5 3 3	31.5	32						2	10	19	1							
5 3 4	36.6	61					1	3	21	36								
5 3 5	57.7	100					1	2	38	59	6							
5 3 6	2.2	14							7	6	1							
5 4 4	4.5	5							3	1	1							
5 4 5	122.7	175					1	6	60	93	14	1						
5 4 6	7.5	15							6	7	2							
5 5 4	7.5	0																
5 5 5	147.0	135						13	42	73	7							
5 5 6	7.6	4							2	2								
5 6 4	1.5	0																
5 6 5	191.3	37						2	17	18								
5 6 6	3.5	6								6								
5 7 4	1.0	0																
5 7 5	287.4	188				1	1	4	76	97	6	3						
5 7 6	1.0	0																
5 8 4	10.0	4								2	2							
5 8 5	954.5	213						5	81	116	10							
5 9 4	4477.9	1179					1	14	385	737	37	3						
5 9 5	2927.3	1223			3	6	20	48	441	612	61	15	15	2				
5 10 4	7631.5	1986				2	7	59	748	1000	71	11						
5 10 5	457.0	15							3	12								
6 1 2	15.1	49							11	30								
6 1 3	40.0	87						1	44	37	4	1						
6 1 4	1.0	9						1	2	6								
6 1 5	0.2	0																
6 2 2	2.0	0																
6 2 3	21.6	41						1	18	21	1							
6 2 4	11.9	72						8	16	42	5	1						
6 2 5	5.2	37						1	12	22	2							
6 3 2	1.6	0																
6 3 3	17.1	37						5	11	18	3							
6 3 4	32.8	73							34	43	6							
6 3 5	74.6	369						16	121	192	33	6						
6 3 6	3.5	46					1	2	11	27	4	1						
6 4 3	3.0	0																
6 4 4	0.2	0																
6 4 5	143.3	151						2	57	85	9							
6 4 6	8.7	12							1	10	1							
6 5 3	0.5	0																
6 5 4	2.0	0																
6 5 5	154.7	148					1	5	12	47	67	11	5					
6 5 6	1.5	3								1	2							
6 6 5	184.9	82						2	27	50	3							
6 7 4	1.5	0																
6 7 5	275.4	93						1	38	47	7							
6 8 4	17.0	2								2								
6 8 5	474.7	109					1	2	7	41	46	4	5	1				
6 9 4	344.1	98								27	67	4						
6 9 5	1105.7	217					2	3	83	124	4		1					
6 10 4	399.3	28								10	18							
6 10 5	15.0	0																
TOTAL	52969.0	26624	0	0	14	29	125	915	9181	14407	1599	276	71	6	0	1	0	2



TABLE A31  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
LOGISTICS, LONG RANGE MISSION  
DATA SAMPLE

M-HH-A			TOTAL PPHRS	LOAD FACTOR DISTRIBUTION (6)																																	
BLOCK	TIME (MIN)			-0.9	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0		
3	1	2	2.2											6	7		1																				
3	2	2	2.0											4	6																						
3	3	2	4.2											5	5																						
3	3	3	3.4										1	10	7																						
3	3	4	4.9											6	4																						
3	4	4	2.0											1																							
3	4	5	4.3																																		
3	5	5	4.5																																		
3	6	5	5.0										1	2	2																						
3	7	5	6.5																																		
3	8	5	4.0																																		
3	9	4	3.0																																		
3	9	5	1.5																																		
3	10	4	371.9										1	60	49		2																				
4	10	3	3.0												1																						
4	10	4	627.0											87	65		3																				
5	9	4	41.0																																		
5	9	5	205.0										1	1	1																						
5	12	4	360.2											4	2																						
5	10	5	7.0																																		
4	1	3	0.5																																		
4	2	2	1.0																																		
4	2	3	2.0																																		
4	2	4	0.2																																		
4	3	3	1.2																																		
4	3	4	1.9										1	2	1																						
4	3	5	2.7											7	4																						
4	4	5	7.0											6	16																						
4	5	4	0.3																																		
4	5	5	9.7													11	1																				
4	5	6	1.0													5																					
4	6	4	2.0																																		
4	6	5	8.5																																		
4	7	4	1.0																																		
4	7	5	12.0											10	15																						
4	8	5	15.0									3	6	39	39		4	4																			
4	9	4	20.0																																		
4	9	5	74.0																																		
4	10	4	76.0																																		
TOTAL	1842.1		562	0	0	0	0	0	0	0	0	11	273	260	11	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		



TABLE A31  
DISTRIBUTION OF FIRST LOAD FACTORS  
FOR THE  
CHARLOTTE AIR FORCE BASE  
TRAINING DIVISION  
DATA SAMPLE

W-NO-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
2 1 1	12.2	3						1		2								
2 1 2	424.3	1752						72	686	914	127	9						
2 1 3	58.3	400				2	4	28	100	102	52	7	2					
2 1 4	1.3	13						2	9	6								
2 1 5	1.8	3						1	2	2								
2 2 1	1.0	0																
2 2 2	631.3	1540						8	86	871	811	90	4					
2 2 3	350.3	1379					3	5	57	445	690	132	14	7				
2 2 4	83.4	418			1		10	64	137	144	55	19	4					
2 2 5	4.9	31						1	0	21	1							
2 2 6	1.3	3							2	1								
2 3 1	1.0	0																
2 3 2	258.9	226						0	71	129	17	1						
2 3 3	218.0	412					1	16	144	212	30	1						
2 3 4	53.2	245					2	18	90	111	16	5	3					
2 3 5	21.0	245			1	2	5	11	72	104	30	9	3					
2 3 6	1.6	4							1	3								
2 4 4	12.3	16						2	6	7	1							
2 4 5	26.3	40					1	1	10	22	5	1						
2 4 6	0.6	1								1								
2 5 4	9.4	15							7	0								
2 5 5	20.4	20							0	0	4							
2 6 4	8.6	20						1	0	0	4	1						
2 6 5	19.2	35						3	10	16	6							
2 6 6	0.2	2									2							
2 7 3	17.0	59						4	20	25	2							
2 7 4	75.9	232					2	13	95	100	13	1						
2 7 5	95.0	163						0	62	86	8	1						
2 8 3	5.7	8						1	1	4								
2 8 5	37.3	40						4	16	10	1							
2 9 4	0.5	1							1									
2 9 5	17.5	2								2								
2 10 4	99.0	10						1	5	4								
2 10 5	0.5	0																
3 1 1	0.3	8							3	5								
3 1 2	869.4	3767						5	123	1395	1992	232	10	2				
3 1 3	257.2	1599						9	81	622	747	120	11	1				
3 1 4	17.1	140						2	6	65	33	11	2	1				
3 1 5	58.7	177						1	0	72	79	10	1					
3 2 1	14.4	9								5	4							
3 2 2	846.7	1092						2	34	745	1820	76	2	1				
3 2 3	1297.6	3962						3	9	151	1430	2006	240	21	2			
3 2 4	160.2	1055						4	14	96	357	421	122	27	13			
3 2 5	166.8	1130						3	9	82	390	405	126	22	5			
3 2 6	0.2	2								1								
3 3 1	3.7	0																
3 3 2	306.3	374						2	0	167	177	10	2					
3 3 3	936.0	1701						1	3	60	637	805	107	7	1			
3 3 4	324.4	1264						4	19	69	410	536	160	35	14	1		
3 3 5	214.5	913						11	10	60	282	364	119	29	21	1		
3 3 6	14.5	80							3	27	53	3	1	1				
3 4 2	10.5	4								2	2							
3 4 3	53.8	13								3	10							
3 4 4	91.0	204						1	5	16	109	123	24	3	3			
3 4 5	196.7	421						2	3	20	155	198	36	5	2			
3 4 6	7.1	26							1	7	0	7	2	1				
3 5 2	2.0	0																
3 5 3	7.2	4								2	2							
3 5 4	86.0	133							0	53	65	7						
3 5 5	194.1	232						2	12	110	84	13	3					
3 6 6	2.9	3								1	2							
3 6 3	51.9	12								2	10							
3 6 4	331.6	279						1	11	112	126	27	1	1				
3 6 5	383.3	450						1	5	20	167	212	37	2				
3 6 6	3.4	7								3	1	2						
3 7 3	207.1	64								3	22	37	4					
3 7 4	636.5	492								15	178	220	10	6	3	1		
3 7 5	525.3	1239						3	2	11	50	477	599	101	21	7		
3 7 6	11.9	0																
3 8 3	28.2	25								1	7	17						
3 8 4	47.0	42								1	10	23						
3 8 5	203.6	250								3	4	29	70	112	24	4		
3 9 3	1.0	0																
3 9 4	32.5	32																
3 9 5	239.3	175								4	14	60	70	9	4	2		
3 10 3	0.8	0																
3 10 4	397.2	157								1	2	64	89	1				
3 10 5	34.5	6										3	3					
4 1 1	4.1	3																
4 1 2	81.2	460								1	5	135	226	29	4			
4 1 3	41.9	221								1	9	83	99	29	1			
4 1 4	2.0	10										0	0	2				
4 1 5	0.8	16										4	9	1	1			
4 2 2	71.5	69										22	40	6	1			
4 2 3	96.3	179								2	0	20	100	12	1			
4 2 4	39.0	201								3	0	70	82	20	0	1		
4 2 5	29.1	133										0	57	20				
4 2 6	2.1	54								2	1	19	23	7	1	1		
4 3 2	66.6	80										0	40	3				
4 3 3	63.1	173								1	0	77	75	10	1			
4 3 4	149.0	323								4	21	111	171	29	6	1		
4 3 5	97.0	236								0	0	88	115	19	3	2		
4 3 6	5.9	7										2	5					
4 4 3	2.4	0																
4 4 4	13.0	56								3	19	19	14	1				
4 4 5	125.1	250								2	16	90	106	29	4	2	1	
4 4 6	4.4	5										5						
4 5 3	2.0	0																
4 5 4	27.6	42								1	18	16	4	2	1			
4 5 5	137.0	149								4	54	86	4	1				



TABLE A32 continued  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

W-M-A BLICK	BLICK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR DISTRIBUTION (G)											
								0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0	
4 3 6	3.5	13							8	3	1	1							
4 6 3	27.5	2							1	1									
4 6 4	157.0	103							46	54	2	1							
4 6 5	225.9	238					1	7	98	115	14	2	1						
4 6 6	1.7	0																	
4 7 2	3.0	0																	
4 7 3	106.4	104						1	48	54	1								
4 7 4	252.6	154						1	67	80	6								
4 7 5	348.7	272					1	4	105	145	15	2							
4 7 6	8.5	0																	
4 8 3	19.0	2								2									
4 8 4	13.0	18							8	9	1								
4 8 5	118.1	148						3	59	83	2	1							
4 8 6	0.5	0																	
4 9 4	24.3	13							5	7	1								
4 9 5	63.7	6							2	4									
4 10 4	38.0	13						1	4	6									
4 10 5	1.0	3							1	2									
TOTAL	14326.9	33443	0	0	0	45	196	1488	12277	16192	2577	345	117	5	7	0	0	0	0

TABLE A33  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
MISCELLANEOUS MISSION  
DATA SAMPLE

W-M-A BLICK	BLICK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR DISTRIBUTION (G)											
								0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0	
2 1 1	0.7	0																	
2 1 2	20.1	24						2	5	16	1								
2 1 3	5.0	12						2	6	3	1								
2 1 4	2.5	19					1		8	9	1								
2 1 5	0.5	1							1										
2 2 2	12.7	1							1										
2 2 3	21.8	13					1		5	6		1							
2 2 4	151.1	269					1	12	107	136	11	1	1						
2 2 5	22.0	113						5	53	41	9	5							
2 2 6	5.9	38						2	11	20	5								
2 3 4	5.5	22							4	18									
2 3 5	28.2	50						2	17	24	4	1							
2 3 6	8.7	13							6	6	1								
3 1 2	10.0	4								4									
3 1 3	3.0	1					1												
3 1 4	35.8	64						2	31	30	1								
3 1 5	256.4	580						15	260	284	21								
3 2 2	113.0	8							4	4									
3 2 3	123.0	20							9	11									
3 2 4	194.4	392					2	17	170	175	26	2							
3 2 5	339.0	1037					1	5	53	405	509	55	8	1					
3 2 6	2.9	7							1	3	2	1							
3 3 2	15.7	4							1	1	1								
3 3 3	20.1	1							1	1									
3 3 4	81.4	133						1	51	76	5								
3 3 5	180.0	365						13	148	185	18	1							
3 3 6	2.5	14							5	5	3	1							
3 4 4	50.3	32							18	14									
3 4 5	93.1	119					2	2	50	62	3								
3 4 6	1.0	3									3								
3 5 4	24.8	7							2	5									
3 5 5	76.0	68						7	24	28	8		1						
3 5 6	1.1	4							2	3	1								
3 6 4	13.8	18						4	10	4									
3 6 5	116.3	120					1	7	57	53	8								
3 6 6	2.0	2								2									
3 7 4	11.0	3							3										
3 7 5	75.3	23							4	15									
3 7 6	0.5	0																	
4 1 2	5.3	29							5	17	3								
4 1 3	5.3	48					1	4	15	19	7	1	1						
4 1 4	9.1	31						3	9	18	1								
4 1 5	41.3	134					1	2	9	40	72	10							
4 2 2	4.2	0																	
4 2 3	4.0	0																	
4 2 4	16.7	37						1	17	17	2								
4 2 5	39.1	137					1	3	41	76	13	3							
4 2 6	2.5	27						3	4	15	3	2							
4 3 4	56.0	48							21	25	2								
4 3 5	75.1	89						3	33	42	5								
4 3 6	1.3	12							4	7	1								
4 4 4	11.0	8							3	2	1								
4 4 5	54.8	51						1	27	19	4								
4 4 6	6.0	9							4	5									
4 5 4	17.5	32							7	24	1								
4 5 5	89.4	64					1	3	24	34	1		1						
4 5 6	4.7	6							3	3									
4 6 4	0.9	1							1										
4 6 5	88.4	47						3	18	24	1		1						
4 6 6	1.9	2								2									
4 7 5	29.0	23							5	16	2								
TOTAL	2685.7	4439	0	0	0	2	21	181	1769	2188	243	29	6	0	0	0	7	0	0



TABLE A34  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

W-MH-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																
			-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0	
3 1 2	1.0	1									1								
3 2 2	1.0	0																	
3 2 3	3.0	3							2	1									
3 2 4	8.0	1							1										
3 3 4	10.0	1								1									
4 1 2	2.0	20							6	11	3								
4 1 3	0.7	5						2	1	2									
4 1 4	0.2	1								1									
4 2 2	3.4	31						7	24	23	2								
4 2 3	0.1	0																	
4 2 4	0.1	7							1	6									
4 2 5	0.0	18							5	11	2								
4 3 3	14.0	11							4	6	1								
4 3 4	0.0	11							6	5									
4 3 5	9.8	10							2	15	1								
4 3 6	0.1	0																	
4 4 3	4.3	0																	
4 4 4	1.3	1								1									
4 4 5	6.0	22							8	13	1								
4 4 6	0.6	3						1		1	1								
4 5 5	1.2	1								1									
4 5 6	0.2	7							7										
4 6 4	0.3	1							1										
4 6 5	2.7	11						1	7	3									
TOTAL	74.6	184	0	0	0	0	0	6	70	102	11	0	0	0	0	0	0	0	

TABLE A35  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
AIRBORNE TRAINING MISSION  
DATA SAMPLE

W-MH-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																
			-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0	
3 1 2	1.0	5							1	4									
3 2 2	1.5	0																	
3 2 3	2.0	0																	
3 2 4	2.0	1							1										
3 2 5	19.0	11						1	3	7									
3 3 4	0.7	0																	
3 3 5	7.9	0																	
3 4 4	3.4	26							13	19	3								
3 5 5	9.0	16							3	13									
4 1 2	0.1	0																	
4 1 3	0.1	0																	
4 1 4	0.1	0																	
4 1 5	0.1	0																	
4 2 4	0.1	0																	
4 2 5	18.7	0																	
4 3 5	18.0	0																	
TOTAL	87.9	68	0	0	0	0	0	1	21	43	3	0	0	0	0	0	0	0	



TABLE 23  
DISTRIBUTION OF OVERLOAD FACTORS  
FOR THE  
CHINA AIR FORCE BASE  
LOGISTICS, HANSHAN MISSION  
DATA SAMPLE

N-M-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)															
			-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
2 1 1	0.6	1							1									
2 1 2	10.1	20							6	14								
2 1 3	0.5	0																
2 1 4	0.2	2							1	1								
2 2 2	13.3	17							4	11								
2 2 3	0.8	4																
2 2 4	1.0	1																
2 2 5	0.0	2							1	1								
2 3 2	7.9	7							4	3								
2 3 3	13.2	8						1	4	3								
2 3 4	9.3	64							30	27								
2 3 5	2.1	6							3	3								
2 4 3	1.3	1																
2 4 4	4.0	6							2	3								
2 4 5	10.1	39						2	10	12								
2 5 4	0.3	4							3	1								
2 5 5	4.5	23						1	13	7								
2 6 4	1.3	0																
2 6 5	0.9	47							21	24								
2 7 5	12.4	30							10	10								
2 8 5	10.3	10							1	0								
2 9 4	20.0	30							7	20								
2 9 5	30.8	7							3	4								
2 10 4	103.0	92							20	66								
2 10 5	0.4	1							1									
3 1 1	1.0	0																
3 1 2	102.3	249							99	140								
3 1 3	10.6	46							13	30								
3 1 4	2.2	4							1	3								
3 2 1	0.3	0																
3 2 2	214.0	239						4	00	130								
3 2 3	140.0	331						5	140	170								
3 2 4	20.0	130					2	11	90	30								
3 2 5	2.0	10							3	7								
3 3 2	127.2	199						2	01	31								
3 3 3	104.0	250						3	100	131								
3 3 4	131.7	404					1	2	17	120								
3 3 5	79.0	346					2	10	39	100								
3 3 6	1.4	14							1	0								
3 3 7	0.2	3							1									
3 4 2	3.0	2																
3 4 3	39.4	99							1	44								
3 4 4	90.4	204							10	130								
3 4 5	209.9	473					1	4	32	214								
3 4 6	4.7	24							1	0								
3 5 3	14.0	7								3								
3 5 4	20.4	43					1	4	2	20								
3 5 5	204.4	230							7	90								
3 5 6	4.0	2								1								
3 6 4	29.3	01							0	31								
3 6 5	232.2	319					1	1	4	17								
3 6 6	0.1	1								1								
3 7 3	2.0	0																
3 7 4	10.3	01						1	3	19								
3 7 5	302.6	479					1	4	10	170								
3 7 6	4.5	10								5								
3 8 4	11.0	7								1								
3 8 5	023.0	477							12	171								
3 8 6	0.3	0								1								
3 9 4	072.4	360						1	10	130								
3 9 5	027.2	320					1		0	130								
3 9 6	1.0	0																
3 10 4	3100.4	1371					1	4	30	499								
3 10 5	102.0	97							2	23								
4 1 1	0.5	0																
4 1 2	37.1	01								23								
4 1 3	11.0	25								9								
4 1 4	0.2	0																
4 1 5	0.3	0																
4 2 2	00.0	00							1	20								
4 2 3	41.7	44								19								
4 2 4	3.0	2																
4 2 5	0.4	0																
4 3 2	30.1	30								13								
4 3 3	133.3	206								102								
4 3 4	70.1	192								39								
4 3 5	79.7	210					1	2	9	63								
4 3 6	7.7	114							5	32								
4 4 2	11.3	1								1								
4 4 3	29.9	57								24								
4 4 4	72.2	114								47								
4 4 5	114.2	201						1	7	70								
4 4 6	1.4	0																
4 5 3	7.0	0																
4 5 4	21.6	27								14								
4 5 5	122.0	169							2	03								
4 6 2	0.5	0																
4 6 3	2.0	1																
4 6 4	21.7	7								3								
4 6 5	202.3	104								09								
4 7 3	7.0	0																
4 7 4	20.0	13								1								
4 7 5	031.1	300						1	19	197								
4 7 6	0.3	0																
4 8 4	00.0	11								6								
4 8 5	042.4	317						4	12	175								
4 8 6	0.5	0																
4 9 4	2432.3	790						1	1	21								
4 9 5	2704.1	941					1	3	22	317								
4 10 3	11.0	13								0								



TABLE A36 concluded  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
LOGISTICS, MEDIUM RANGE MISSION  
DATA SAMPLE

B-W-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
4 10 4	13786.3	4732				9	24	147	1725	2638	160	22	7					
4 10 5	655.2	168							57	110	1							
5 1 2	29.8	140					2	1	44	85	5	2	1					
5 1 3	22.3	93						2	38	50	3							
5 1 4	1.6	14							7	7								
5 1 5	0.1	0																
5 2 2	12.9	62						1	29	31	1							
5 2 3	44.5	187						3	78	90	14	2						
5 2 4	2.6	14							3	7	1	1						
5 2 5	4.0	22					1		5	15	1							
5 2 6	0.5	0																
5 3 2	0.3	0																
5 3 3	29.6	90					1	5	39	39	6							
5 3 4	30.8	68					1	7	27	25	5	2	1					
5 3 5	66.9	315				1	4	18	101	143	41	5	2					
5 3 6	5.0	9							1	8								
5 4 3	3.0	1							1									
5 4 4	4.5	2							1	1								
5 4 5	115.2	178						7	55	95	18	3						
5 4 6	6.1	30						1	11	15	2	1						
5 5 3	2.0	0																
5 5 4	0.5	0																
5 5 5	123.1	32						1	11	19	1							
5 5 6	1.7	0																
5 6 3	2.5	0																
5 6 4	1.0	0																
5 6 5	191.4	125					2	4	31	67	13	6	2					
5 6 6	1.0	0																
5 7 3	1.0	0																
5 7 4	1.0	0																
5 7 5	274.1	150						2	60	82	4	2						
5 8 4	119.3	0																
5 8 5	733.3	235				1	1	9	89	122	12	1						
5 8 6	0.6	0																
5 9 4	3277.7	691					3	7	172	477	28	3	1					
5 9 5	3000.9	837				1	3	31	260	501	31	8	1	1				
5 10 3	1.0	0																
5 10 4	9198.2	2177					1	45	728	1342	57	4						
5 10 5	773.9	184						2	53	81								
6 1 2	15.6	22							4	18								
6 1 3	50.5	81						1	24	54								
6 1 4	4.9	30						1	15	12	2							
6 1 5	0.6	4							2	2								
6 2 2	1.5	3								3								
6 2 3	28.8	79							9	19	1							
6 2 4	10.6	36							12	22	2							
6 2 5	6.6	74							8	13	3							
6 3 3	15.2	9							2	7								
6 3 4	35.1	55							18	31	6							
6 3 5	100.6	138				2	4	14	117	150	39	7	5					
6 3 6	24.0	25							14	11								
6 4 3	0.5	0																
6 4 4	4.4	0																
6 4 5	148.4	134					1	5	34	86	4	1	1					
6 4 6	0.2	17							6	11								
6 5 4	1.0	0																
6 5 5	200.6	101						1	28	63	8	1						
6 5 6	4.0	9							1	8								
6 6 4	1.0	0																
6 6 5	265.3	116						2	47	62	5							
6 6 6	3.0	0																
6 7 5	282.2	131					2	4	34	76	14	1						
6 7 6	1.0	0																
6 8 4	7.5	1																
6 8 5	393.7	54					1	1	17	38	2							
6 9 4	327.3	94							38	54	1							
6 9 5	814.5	246						4	116	212	14							
6 10 4	1111.5	230					1	2	69	149	8	1						
6 10 5	79.0	0																
TOTAL	52880.0	24926	0	0	5	23	189	785	8670	13985	1178	172	46	3	0	0	0	0



TABLE A57  
DISTRIBUTION OF UNIT LOAD FACTORS  
FOR THE  
BOMB AIR FORCE BASE  
TRAINING REGION  
DATA SAMPLE

U-100-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR DISTRIBUTION (G)									
								0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
2 1 1	1.5	0															
2 1 2	176.1	429					1	2	21	290	391	31	5				
2 1 3	37.3	100					1		0	72	60	0	3	1			
2 1 4	0.3	5							2	2	2	1					
2 1 5	0.2	1															
2 2 2	261.9	720						3	20	345	347	37	1				
2 2 3	137.9	609						4	32	299	272	35	5	1			
2 2 4	26.2	254					1	2	19	83	113	29	11				
2 2 5	0.6	0															
2 2 6	0.5	4							1			2					
2 3 2	62.7	152							3	66	32	4					
2 3 3	81.7	416					1	3	20	130	207	37	3	1			
2 3 4	49.5	412					1	0	29	143	160	56	9	2			
2 3 5	17.4	20							2	10	15	1					
2 3 6	0.3	1								1							
2 4 4	4.0	9								4	5						
2 4 5	21.5	26								0	16	2					
2 4 6	1.0	0															
2 5 4	14.3	11								7	4						
2 5 5	26.0	32							2	13	16	1					
2 6 5	19.1	72							1	31	36	4					
2 7 4	0.5	15							1	7	5	2					
2 7 5	62.8	175							3	62	113	7	1				
2 8 4	1.0	2															
2 8 5	5.3	1								1							
2 9 4	42.0	1									1						
2 9 5	4.0	1								1							
2 10 4	4.0	0															
2 10 5	7.5	0															
3 1 1	0.3	0								1	5	3	1				
3 1 2	1393.8	3209						10	123	1769	3067	200	25	1			
3 1 3	570.3	2048					2	4	67	676	1114	160	10	1			
3 1 4	20.3	197						3	22	57	83	22	7	3			
3 1 5	0.2	0															
3 2 2	1299.4	3596							5	67	1262	1912	130	7	3		
3 2 3	1616.3	4270					1	2	13	160	1462	2305	274	26	2		
3 2 4	149.6	755						1	10	39	213	373	66	10	3		
3 2 5	12.4	170							4	20	50	99	27	0	6		
3 3 2	242.3	401							1	0	199	262	21	3			
3 3 3	1213.0	2893							10	95	1644	1900	197	23	3		
3 3 4	432.4	1630					1	3	19	123	322	632	193	51	11		
3 3 5	117.5	862					2	4	15	67	264	283	131	43	13		
3 3 6	5.4	14								1	1	11	1				
3 4 2	2.6	0															
3 4 3	39.7	31							1		16	13		1			
3 4 4	82.1	315							2	10	166	143	31	9	2		
3 4 5	176.9	491					4	5	29	152	200	41	9	3			
3 4 6	6.6	14									5	7	2				
3 5 2	6.2	0															
3 5 3	214.7	123								1	49	71	2				
3 5 4	617.9	340								8	120	105	17				
3 5 5	301.9	365							1	11	120	172	33				
3 5 6	2.3	0															
3 6 3	43.7	5										4	1				
3 6 4	250.3	62								6	13	23	2	1			
3 6 5	245.3	87									36	47	3	1			
3 6 6	9.6	5									2	2	1				
3 7 3	21.7	14									6	8					
3 7 4	162.9	129									37	82	0	1	1		
3 7 5	325.0	450								12	142	247	49				
3 7 6	1.0	0															
3 8 4	7.0	37									19	13	3				
3 8 5	135.1	199								5	60	123	10		1		
3 9 4	65.4	117								1	6	93	10				
3 9 5	226.7	691								2	27	232	360	99	5		
3 10 3	12.2	19										0	7				
3 10 4	1340.1	404								1	3	113	262	11	1		
3 10 5	22.5	107									4	66	54	3			
4 1 1	0.4	1															
4 1 2	95.0	309								9	127	246	15	2			
4 1 3	33.0	205								3	67	123	12				
4 1 4	1.5	30								2	11	13	3	1			
4 1 5	3.0	69								2	6	23	11	5			
4 2 2	52.2	82									1	33	42	0			
4 2 3	162.4	394									1	136	239	13	1		
4 2 4	20.6	76					1			1	4	31	39	5			
4 2 5	5.1	159								2	5	46	97	19	6	2	
4 3 2	14.0	7										2					
4 3 3	148.0	174									6	32	32	12	3	1	
4 3 4	128.2	495								1	3	23	132	279	71	13	1
4 3 5	91.2	323								1	5	22	111	144	29	13	
4 3 6	7.6	33									1	11	17	3	1		
4 4 3	3.9	0									1	1	7				
4 4 4	21.1	47									2	16	27	2			
4 4 5	105.1	317								2	5	10	146	24	0	1	
4 4 6	1.9	6									1	1	3	1			
4 5 3	17.0	12										4	0				
4 5 4	90.0	123									5	42	71	7			
4 5 5	173.2	297									9	89	101	16	1	1	
4 5 6	1.7	0															
4 6 4	25.7	10										3					
4 6 5	104.2	46										19	26	1			
4 6 6	1.0	0															
4 7 3	0.0	1										1					
4 7 4	23.7	10										1	7	2			
4 7 5	127.6	100								1	7	60	96	0			
4 8 4	2.5	1											1				
4 8 5	127.9	157									1	7	55	66	0	2	
4 9 4	91.5	262									1	4	63	122	11	1	
4 9 5	257.7	350										3	130	194	0	1	



TABLE A37 concluded  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

W-MH-A BLUCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
10 4	2275.4	564					2	11	205	320	21	4	1					
10 5	21.0	1							1									
11 2	5.8	20							2	17	1							
11 3	7.2	21							8	13								
2 3	6.2	6							4	2								
2 4	1.6	1								1								
2 5	1.2	6							2	4								
3 3	1.2	7						1	1	9								
3 4	5.0	25							10	12	2	1						
3 5	28.0	93						4	29	93	7							
3 6	1.5	5							1	4								
4 4	36.3	27							9	17	1							
4 6	2.5	2							1	1								
5 5	51.0	7							5	2								
5 6	0.8	0																
5 6 5	80.3	10							5	5								
5 7 5	50.7	25							9	16								
5 8 4	1.0	0																
5 8 5	63.2	30						2	9	18			1					
5 9 4	195.0	81						4	37	41								
5 9 5	393.4	119						1	44	72								
5 10 4	952.9	100						1	107	105								
5 10 5	236.4	89						2	32	51								
6 1 2	0.5	4							1	3								
6 1 3	0.3	3								3								
6 2 3	0.6	3							1	2								
6 3 3	0.2	0																
6 3 4	0.8	0																
6 5 5	0.8	1																
6 6 6	1.0	5							2	3								
TOTAL	18829.4	35404	0	0	7	26	167	1324	12300	18725	2429	361	65	0	0	0	0	0

TABLE A38  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
LOGISTICS DROP, SHORT RANGE MISSION  
DATA SAMPLE

W-MH-A BLUCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
3 1 2	8.4	54						2	23	32	2							
3 1 3	5.0	94						4	24	61	8							
3 1 4	15.8	306			1	3	8	17	101	119	46	7	4					
3 1 5	95.1	2246			3	4	58	214	648	876	308	103	25	2				
3 2 2	46.8	5							5									
3 2 3	24.0	7							3	4								
3 2 4	54.9	26							10	8								
3 2 5	107.0	193						2	62	82	5	2						
3 2 6	1.0	0																
3 3 1	2.0	0																
3 3 4	38.2	26							11	15								
3 3 5	22.3	14							3	10	1							
3 3 6	1.7	0																
3 4 5	1.5	5							2	3								
3 5 5	1.5	4							4									
3 6 5	1.5	4							2	2								
3 7 5	4.0	0																
4 1 2	0.7	4							1	3								
4 1 3	1.5	12							2	9	1							
4 1 4	1.2	15							9	10								
4 1 5	0.4	14						2	4	5	1		2					
4 2 5	1.9	7						1	4	2								
4 3 4	2.0	1								1								
4 3 5	17.3	43							15	25	3							
4 3 6	1.0	4							4									
4 4 5	12.5	13							6	6	1							
4 5 5	8.0	6							2	4								
4 6 4	0.5	0																
4 6 5	10.3	8							7	1								
4 7 5	74.7	9								8	1							
TOTAL	566.7	3089	0	0	4	18	67	242	956	1286	377	112	31	2	0	0	0	0



TABLE A39  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
MISCELLANEOUS MISSION  
DATA SAMPLE

W-H-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	2.0	2.5	3.0
2 1 2	1.5	9							3		4									
2 1 3	0.6	35							12		22									
2 1 4	0.3	16							5		9									
2 2 2	1.9	8							3		4									
2 2 3	4.0	14							9		9									
2 2 4	6.4	74					1	1	4		20		20							
2 2 5	2.5	62							3		10		20							
2 3 3	3.1	29							1		19		11							
2 3 4	19.5	202						1	5		81		100							
2 3 5	0.5	20						1	2		7		3							
3 1 2	17.9	10									1		13							
3 1 3	6.1	5									2		3							
3 1 4	32.6	100							8		67		74							
3 1 5	128.3	604						3	32		283		323							
3 2 2	89.0	84							1		27		56							
3 2 3	45.6	27									9		16							
3 2 4	112.2	736					1	4	35		232		372							
3 2 5	212.5	1510					3	14	75		529		744							
3 2 6	1.0	2									2									
3 3 2	4.4	7									2		4							
3 3 3	13.4	13									6		7							
3 3 4	31.2	165					1		7		47		94							
3 3 5	43.6	310					1	4	21		118		132							
3 3 6	0.5	9							1		7		9							
3 4 5	9.2	14									7		9							
3 5 5	3.5	7									2		5							
3 6 5	4.0	9									5		4							
3 7 5	17.5	70							1		27		41							
4 1 2	0.8	3									1		1							
4 1 3	1.4	14							1		5		6							
4 1 4	1.2	19							1		7		8							
4 1 5	0.4	3									1		2							
4 2 2	0.3	2											2							
4 2 3	0.2	1							1											
4 2 4	0.7	8							1		2		4							
4 2 5	3.0	47							1		10		24							
4 3 4	12.3	6											6							
4 3 5	33.4	133					1		2		4		40							
4 3 6	1.0	4									2		2							
4 4 5	10.6	10									8		10							
4 4 6	1.0	0																		
4 5 5	11.0	4									7		2							
4 6 5	31.1	17							1		12		4							
4 7 5	50.9	30							2		15		21							
TOTAL	900.3	4618	0	0	1	7	31	217	1697	2297	343	92	13	0	0	0	0	0	0	0

TABLE A40  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

W-H-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	2.0	2.5	3.0
3 1 2	1.6	8							6		4									
3 2 2	2.0	6							1		5									
3 2 3	2.0	9							7		2									
3 3 3	4.1	14							9		4									
3 3 4	0.5	1																		
3 3 5	0.6	1																		
3 4 5	0.8	0																		
3 5 5	1.0	0																		
3 6 5	2.1	2																		
3 7 5	3.0	0																		
3 8 5	3.7	1																		
3 9 5	12.0	5																		
4 1 2	0.9	0																		
4 1 3	0.3	2																		
4 2 3	0.2	0																		
4 3 3	0.3	2																		
4 3 4	0.3	3																		
4 3 5	0.4	1																		
4 4 5	1.2	0																		
4 5 5	1.4	1																		
4 6 5	0.4	0																		
TOTAL	38.6	56	0	0	0	0	0	1	34	20	1	0	0	0	0	0	0	0	0	0



TABLE A41  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TOWER AND PILE CAPS  
LOCATION, GUSTON BARRIS REGION  
DATA SAMPLE

U-W-A GUST	GUST TIME (HRS)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)											
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1
2 1 2	4.2	4										1	3	
2 2 2	23.8	23										10	17	
2 3 2	4.0	6										3	2	
2 3 2	97.0	16									1	0	1	
2 3 2	42.6	20								1	1	11	14	
2 3 4	20.1	24								1	3	10	32	
2 3 6	2.0	22								1		10	0	
2 3 6	1.5	20										10	0	
2 4 3	4.0	0											1	
2 4 4	7.0	0												
2 4 5	1.2	0												
2 4 6	0.5	0												
2 5 4	0.4	0												
2 5 5	7.0	3									1	2	1	
2 5 7	0.2	0										3		
2 6 3	2.3	0												
2 6 4	9.0	0												
2 6 5	0.3	0												
2 6 6	1.0	1											1	
2 7 5	24.3	2											1	
2 8 5	24.0	10										0	2	
2 9 5	7.0	1										1		
3 1 2	17.9	43										17	24	
3 1 3	3.2	1										1		
3 1 4	1.0	1										1		
3 1 5	0.5	0												
3 2 2	32.0	66										1	32	
3 2 3	11.1	29										1	7	
3 2 4	1.4	0												
3 2 5	1.2	0												
3 3 2	72.9	73										23	48	
3 3 3	127.3	246										9	130	
3 3 4	36.6	122										1	7	
3 3 5	17.6	64										2	5	
3 4 2	6.0	5										1	4	
3 4 3	0.9	0										7	1	
3 4 4	24.3	120										2	5	
3 4 5	30.0	123										4	35	
3 5 3	10.5	0												
3 5 4	12.4	5										4	1	
3 5 5	33.3	62										4	37	
3 5 6	2.3	5										1	3	
3 6 3	0.2	0												
3 6 4	10.0	0										6	2	
3 6 5	67.9	44										10	24	
3 6 6	10.0	9										2	6	
3 7 4	14.5	5										3	2	
3 7 5	176.7	358										14	149	
3 7 6	43.7	106										7	43	
3 8 3	33.0	0												
3 8 4	3.5	0												
3 8 5	254.6	277										19	92	
3 8 6	1.0	0												
3 9 4	23.0	1												
3 9 5	143.3	75										2	22	
3 10 4	99.3	64										21	47	
4 1 2	2.3	6										2	4	
4 1 3	0.4	3												
4 1 4	0.2	2												
4 2 2	6.2	25										11	14	
4 2 3	3.5	2										4	2	
4 2 5	1.0	21										4	17	
4 3 2	16.9	9										4	5	
4 3 3	13.0	6												
4 3 4	0.5	13										4	0	
4 3 5	0.0	36										15	15	
4 4 2	4.0	2										1	1	
4 4 3	0.0	10										1	5	
4 4 4	35.4	65										4	36	
4 4 5	56.9	45										2	20	
4 4 6	11.3	11										7	4	
4 5 5	32.7	54										3	25	
4 5 6	1.5	2										1	1	
4 6 4	2.0	0												
4 6 5	24.0	63										20	32	
4 6 6	1.0	1										1		
4 7 5	66.2	32										10	22	
4 7 6	2.5	0												
4 8 5	152.3	141										2	34	
4 8 6	0.5	0												
4 9 5	107.3	21										3	10	
4 10 4	40.0	0												
5 2 2	0.5	0												
5 2 3	0.3	0												
5 3 3	0.7	0												
5 3 4	0.3	0												
5 3 5	0.7	0												
5 4 5	1.3	0												
5 5 5	2.2	0												
5 6 5	3.0	0												
5 7 5	2.0	0												
5 8 5	7.5	14										3	11	
5 9 4	4.0	16										6	10	
5 9 5	137.0	73										17	56	
5 10 4	95.0	94										29	46	
5 10 5	48.0	99										25	73	
6 1 2	0.5	1										1	1	
6 1 3	0.5	1												
6 2 3	0.5	1												
6 3 4	0.7	1										1		
6 3 5	1.5	0												
6 3 6	2.5	0												
6 4 5	2.5	0												
6 5 5	2.5	0												
6 6 5	3.5	0												
6 7 5	3.5	0												
6 8 5	1.0	0												
TOTAL	2671.3	3100	0	0	4	0	27	117	1117	1641	147	32	6	0



TABLE A-4  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
VARIABLE AND FIXED BASE  
TRANSDUCER DESIGN  
DATA SAMPLE

U-MIN-A BLOCK	CLOCK TIME (HOUR)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR 0.8	0.9	DISTRIBUTION (%)	1.1	1.2	1.3	1.4	1.5	1.6	2.0	2.5	3.0
2 1 1	14.9	1								1									
2 1 2	207.3	881						31	327	481		71	7	2					
2 1 3	20.7	119					1	14	42	53		7							
2 1 4	0.4	2							1	1									
2 2 1	71.3	17							5	12									
2 2 2	2226.7	7819					1	11	100	2762	4184	421	29	3					
2 2 3	301.0	1009					4	20	99	672	880	143	14	1					
2 2 4	10.4	126					2			40	50	9	2						
2 2 5	0.4	3							1	2									
2 3 1	10.0	21							1	11		2	1						
2 3 2	4473.0	19683					2	24	303	6820	8494	740	63	8					
2 3 3	3930.0	11740					4	11	81	621	4181	3736	934	140	28				
2 3 4	1123.4	4531					5	22	181	519	2100	2412	634	199	41				
2 3 5	144.3	1039					1	10	22	99	200	300	137	62	19				
2 3 6	10.1	90							6	18	24	6	1	2					
2 4 1	0.3	0																	
2 4 2	170.1	794							7	208	393	95	2	1					
2 4 3	427.3	1115						5	11	67	415	184	22	5					
2 4 4	614.9	2261						7	42	163	749	980	274	81	17				
2 4 5	604.9	2407						6	19	202	861	989	273	77	37				
2 4 6	80.3	287					1	2	7	27	114	117	13	4	2				
2 5 2	82.3	10								6	4								
2 5 3	339.6	288							10	94	93	4							
2 5 4	495.0	995						1	19	90	333	425	94	23	2				
2 5 5	720.7	1413					1	1	20	94	511	684	105	20	5				
2 5 6	34.3	89							1	30	44	3							
2 6 2	67.4	21								10	11								
2 6 3	934.7	539					1		4	32	221	239	34	7	1				
2 6 4	1277.6	1094					1	5	19	100	761	917	140	17	6				
2 6 5	1200.2	2454					4	7	27	142	904	1089	139	35	8				
2 6 6	70.0	109							2	9	84	82	6	3	1				
2 7 2	30.2	12								0	2								
2 7 3	300.4	412					1	2	2	7	170	205	19	6					
2 7 4	1400.3	1757					1	5	15	51	635	921	112	11	6				
2 7 5	1499.6	3051						4	14	134	1254	1450	100	15					
2 7 6	74.1	191							1	11	79	90	7	1	1				
2 8 3	3.0	0																	
2 8 4	10.6	13								2	10	1							
2 8 5	199.3	107						1		5	45	52	3						
2 9 3	117.9	114								6	49	54	2	1					
2 9 4	60.0	77					1	1	1	7	32	35							
2 9 5	11.9	20					2	1	2	3	5	12	2		1				
2 10 2	1.0	2									2								
2 10 3	61.3	90								4	61	44		1					
2 10 4	30.4	79								6	31	30	4						
3 1 1	10.5	0																	
3 1 2	702.0	2493						2	64	908	1440	225	10	2					
3 1 3	115.4	542						4	23	203	290	45	5						
3 1 4	0.2	1									1								
3 2 1	44.0	20							2	7	19								
3 2 2	4209.1	14267					1	3	24	329	5210	7012	735	43	2				
3 2 3	1777.3	6330					1	3	21	294	2400	3034	480	34	9				
3 2 4	71.4	581							8	42	160	213	100	19	7				
3 2 5	3.0	125							1	3	31	36	27	9	2				
3 2 6	0.4	10							2	2	4	2							
3 3 1	0.2	14								3	9								
3 3 2	9100.4	22100						2	22	532	8504	11919	990	48	3				
3 3 3	10744.0	32503					4	20	116	1309	12109	16880	2448	267	27				
3 3 4	2935.5	15119					10	30	109	1120	5050	6350	1865	394	117				
3 3 5	423.0	3197					5	15	60	260	900	1200	490	122	37				
3 3 6	20.7	313					3	6	15	44	75	83	59	19	9				
3 4 2	390.4	695							3	19	257	324	44	6					
3 4 3	1122.0	2120						3	22	114	730	1078	181	30	9				
3 4 4	1426.3	4504					1	14	61	373	1517	1893	549	123	43				
3 4 5	1417.9	3444					9	11	60	245	1167	1470	349	81	31				
3 4 6	64.5	122							2	5	38	50	21	4	2				
3 5 1	0.2	0																	
3 5 2	264.2	52							2	25	25								
3 5 3	1139.3	304							1	3	155	219	4						
3 5 4	1200.1	2099					4	4	10	131	704	954	155	24	11				
3 5 5	1095.9	3454					3	4	27	217	1344	1700	294	53	14				
3 5 6	77.2	131							2	12	50	55	9	2					
3 5 7	1.1	0																	
3 6 2	174.0	31							1	16	14								
3 6 3	1344.3	457					1		1	7	199	279	19	2					
3 6 4	2049.7	3309					4	2	25	170	1250	1645	225	35	17				
3 6 5	2040.0	4434					2	8	49	247	1726	2191	347	48	22				
3 6 6	74.6	240							2	7	14	90	13	6					
3 6 7	1.5	14									6	7	1						
3 7 2	240.4	26									13	12							
3 7 3	2334.3	724							1	11	261	428	23						
3 7 4	5494.1	4091					3	1	13	144	1901	2109	210	23	6				
3 7 5	4334.9	5726					8	4	34	203	2152	2942	112	90	17				
3 7 6	62.0	84							1	2	28	35	5	1	4				
3 7 7	0.3	72								4	20	30	1						
3 8 3	64.0	18								1	3	11							
3 8 4	82.4	87							1	2	5	27	44	8					
3 8 5	650.0	2005					1	6	35	149	755	865	147	39	26				
3 8 6	20.0	41								1	29	9	2						
3 8 7	10.0	40									14	24	2						
3 9 2	0.0	0																	
3 9 3	449.2	196							8	75	105	10							
3 9 4	213.9	304					2	1	7	20	129	171	20	11	5				
3 9 5	145.9	148							3	8	47	72	13	4	1				
3 10 2	1.0	0																	
3 10 3	204.3	144							2	3	59	77	3						
3 10 4	417.4	629							3	20	223	313	52	8					
3 10 5	20.5	47							1	1	24	13	5						
4 1 2	169.1	777								13	259	452	51	2					
4 1 3	55.0	311								13	124	155	19						



TABLE A43 continued  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TINIAN AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

H-HH-A BLOCK	TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)															
			-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
4 1 4	0.4	4							1	2	1							
4 2 1	0.3	1																
4 2 2	540.9	3137					1	67	1000	1763	200	7	1					
4 2 3	497.1	2733					2	60	1005	1440	187	11						
4 2 4	74.9	306				1		10	102	192	24	7	1					
4 2 5	0.2	1																
4 3 2	090.0	3990					5	80	1300	1093	165	7						
4 3 3	2021.0	10902				1	25	340	2005	5425	704	57	7					
4 3 4	921.3	4117			2	7	30	220	1500	1015	421	89	17	1				
4 3 5	145.0	837			5	3	20	54	246	390	122	27	9	1				
4 3 6	6.1	6							3	3								
4 4 2	20.0	65						1	31	33								
4 4 3	431.1	1423					7	65	953	671	119	8	2					
4 4 4	307.4	407			1	1	4	50	160	169	33	9	2					
4 4 5	543.4	1162			1	3	9	27	70	304	320	110	23	3	1			
4 4 6	9.5	6							3	3								
4 5 2	13.3	0																
4 5 3	151.0	44						1	10	29								
4 5 4	243.0	410					4	10	100	210	24	2						
4 5 5	692.9	895			1	5	0	44	313	415	53	13	3					
4 5 6	10.0	29						1	13	10	4	1						
4 6 2	26.0	0																
4 6 3	139.2	29						1	11	17								
4 6 4	540.5	325						9	126	174	15	1						
4 6 5	1000.0	931			1		5	24	340	403	50	7	1	1				
4 6 6	16.5	36				1		2	19	11	4	1						
4 7 2	5.6	0																
4 7 3	104.0	49						2	7	37	3							
4 7 4	846.3	427						4	140	241	22	8	3	1				
4 7 5	1914.9	1993					2	6	44	593	104	10	6					
4 7 6	20.9	17					1			6	9	1						
4 8 3	12.4	3								2	1							
4 8 4	10.4	26								4	22							
4 8 5	134.5	101						6	20	61	6							
4 8 6	1.0	4							1	3								
4 9 3	32.6	5					1			3	1							
4 9 4	14.0	9					1			2	5	1						
4 9 5	100.0	10								2	7	1						
4 10 4	34.5	29					1			10	16	2						
5 1 2	20.6	34								7	27	2						
5 1 3	10.7	50							1	12	32	5						
5 2 2	60.9	210							2	62	141	13						
5 2 3	92.2	240							7	100	123	17	1					
5 2 4	14.0	31					1		4	9	15	2						
5 3 2	05.1	310							7	119	176	8						
5 3 3	497.6	1431						20	554	705	70	4						
5 3 4	170.6	731					1	4	40	109	234	56	6	1				
5 3 5	40.3	151					1	4	14	46	63	15	8					
5 4 3	56.9	22							1	7	13	1						
5 4 4	72.2	64							2	20	29	5						
5 4 5	166.5	213					1		3	74	110	23	2					
5 4 6	3.0	3								1	2							
5 5 3	20.3	17							1	9	6	1						
5 5 4	71.4	89							3	20	50	7	1					
5 5 5	100.9	197							5	75	105	11	1					
5 5 6	4.1	8								2	6							
5 6 2	2.0	0																
5 6 3	79.0	1								1								
5 6 4	264.9	203						7	66	102	8							
5 6 5	310.0	216				1	3	11	85	101	14			1				
5 6 6	6.0	0							1	3	4							
5 7 3	222.1	7								3	3	1						
5 7 4	617.2	144							2	57	78	6	1					
5 7 5	701.1	691					1	21	221	401	40	7						
5 7 6	10.0	8								5	1	1	1					
5 8 4	15.4	12			1		1	1	2	6	1	1						
5 8 5	23.9	62							3	22	34	2	1					
5 8 6	0.2	0																
5 9 3	8.1	0																
5 9 4	40.4	24								9	15							
5 9 5	10.2	10								7	1	2						
5 10 4	30.7	19								5	14							
5 10 5	14.5	6								4	2							
TOTAL	10442.4	244026	0	1	111	295	1524	10992	89173	129100	16334	2717	678	45	6	0	0	0



TABLE A33  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TINIAN AIRCRAFT BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

N-W-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)															
			-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8
3 2 2	1.6	4							2	2								
3 3 2	11.7	47						1	20	23	23							
3 3 3	14.0	43						1	23	21	10							
3 3 4	4.0	32						0	22	20	2	2						
3 3 5	0.5	1																
3 3 6	0.5	1																
3 4 3	0.5	1																
3 4 4	1.0	0																
3 4 5	0.5	0																
3 4 6	1.5	1																
3 5 4	1.5	0																
3 5 5	0.2	0																
3 5 6	1.5	7																
3 6 4	3.5	2																
3 6 5	2.5	2																
3 7 3	3.0	0																
3 7 4	10.1	0																
3 7 5	0.9	0																
3 8 4	0.5	0																
3 8 5	2.2	5																
3 9 3	3.0	0																
3 9 4	20.0	10																
3 9 5	1.0	0																
3 10 3	0.5	5																
3 10 4	21.2	5																
3 10 5	1.0	0																
4 2 2	0.8	1																
4 2 3	0.4	0																
4 2 4	0.3	0																
4 3 3	0.5	3																
4 3 4	1.4	6																
4 4 3	2.0	0																
4 4 4	1.2	0																
4 4 5	3.4	0																
4 5 3	0.0	0																
4 5 4	0.5	7																
4 5 5	2.0	7																
4 6 4	2.0	0																
4 7 3	1.0	0																
4 7 4	20.5	7																
4 8 4	0.5	0																
TOTAL	211.3	200	0	0	0	0	0	11	117	113	36	3	0	0	0	0	0	0



TABLE A-44  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TRAVIS AIR FORCE BASE  
LOGISTICS, MEDICAL DANCE MISSION  
DATA SAMPLE

WIND-SPEED BLOCK		WIND- TIME (MIN)	TOTAL FEET	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR 0.0	0.9	DISTRIBUTION (%)									
											1.1	1.2	1.3	1.4	1.5	1.6	1.8	2.0	2.5	3.0
3	1	2	13.0	14						4	10									
2	1	3	2.2	1							1									
2	2	1	0.2	7							2									
2	2	2	10.3	10						5	14									
2	2	3	0.0	3						1	2									
2	3	2	22.6	20					1	9	13		1							
2	3	3	17.0	75				1	10	16	40		6	2						
2	3	4	14.3	4						3	5									
2	3	5	2.0	0																
2	4	2	2.0	0																
2	4	3	7.0	2						1	1									
2	4	4	13.0	10						7	12									
2	4	5	24.2	0						3	5									
2	5	3	2.0	0																
2	5	4	0.0	2						1	1									
2	5	5	16.3	27						11	12		3	1						
2	5	6	0.0	0						4	3		2							
2	6	3	1.3	0																
2	6	4	13.1	5						2	2		1							
2	6	5	2.0	0																
2	7	3	5.3	0																
2	7	4	4.3	1																
2	7	5	14.4	1							1									
2	7	6	2.0	0							1									
2	8	4	1.3	2																
2	8	5	63.0	10						2	2		0							
2	9	6	3.0	0																
2	9	4	7.3	0																
2	9	5	13.8	0																
2	10	4	61.3	24					1	0	13		2							
2	10	5	14.2	3						0										
3	1	2	119.7	212				1	2	06	121		2							
3	1	3	13.3	22						7	13									
3	1	4	0.2	0																
3	1	5	0.0	10					1	7	6		3	1						
3	2	2	240.6	301					2	111	106		2							
3	2	3	73.0	90						42	52		4							
3	2	4	11.4	34					2	13	14		3							
3	2	5	3.1	40					4	12	17		6					1		
3	3	2	140.6	143				1	1	61	77		4		1					
3	3	3	309.3	239					0	04	140		7							
3	3	4	191.0	304					10	106	167		14		1					
3	3	5	73.3	157			1		6	63	73		12							
3	3	6	3.4	32		1				14	9		6		1		1			
3	4	2	16.4	13						7	0									
3	4	3	123.0	209					5	70	114		12							
3	4	4	109.7	248				3	0	00	124		12		10		1			
3	4	5	249.4	319			2	2	19	109	140		32		5		1			
3	4	6	11.7	34		1			2	7	13		0		1					
3	5	3	11.7	0																
3	5	4	39.3	44					1	21	20		2							
3	5	5	200.6	106				1	0	00	113		10		2		2			
3	5	6	0.0	20				2	2	4	6		2		3		1			
3	6	3	0.3	0																
3	6	4	44.2	43				3	2	19	13		4		3		1			
3	6	5	393.1	177		1			3	60	104		9							
3	6	6	10.0	1							1									
3	7	3	21.2	0																
3	7	4	42.0	140		1		4	14	33	42		21		5					
3	7	5	943.7	930					27	218	264		23		4					
3	7	6	161.0	83				1	4	32	41		3							
3	8	3	3.3	0																
3	8	4	34.4	0																
3	8	5	1017.0	320				3	11	120	177		9							
3	8	6	3.0	0																
3	9	2	4.0	0																
3	9	3	130.0	0																
3	9	4	1032.1	363				1	10	120	211		14		1					
3	9	5	1637.3	1070		7	3	10	00	446	423		60		21		13		6	1
3	10	3	2.7	7						3	2									
3	10	4	3445.4	2441		1		6	30	743	1340		100		7		1			
3	10	5	123.3	14						6	0									
4	1	1	0.4	0																
4	1	2	72.3	167					5	37	90		7							
4	1	3	13.0	30					3	19	31		5		1					
4	1	4	6.2	00				1	4	24	28		0		2		1			
4	1	5	1.4	19					2	3	6		3		3					
4	2	2	109.0	137					1	32	01		3							
4	2	3	01.7	73					1	20	37		7							
4	2	4	9.3	30					2	10	24		13		1					
4	2	5	9.1	04				2	9	27	33		0		5					
4	3	2	04.1	139					2	06	67		4							
4	3	3	203.0	246					6	102	120		9		1					
4	3	4	90.6	221					4	82	116		15		4					
4	3	5	03.0	203				2	5	13	07		126		32		7		1	
4	3	6	3.4	2					1				1							
4	4	2	7.0	14				1	1	0	4									
4	4	3	76.2	144					3	31	04		6							
4	4	4	123.0	156				1	2	62	00		4		1					
4	4	5	242.0	207				1	13	77	103		12		1					
4	4	6	0.2	1							1									
4	5	2	0.3	0																
4	5	3	10.4	4						3	1									
4	5	4	20.9	19				1	1	4	10		1		1					
4	5	5	331.4	266				1	5	12	100		124		15		6		3	
4	5	6	2.3	0																
4	6	3	0.3	2							2									
4	6	4	15.9	37				2	1	5	23		10		7		1			
4	6	5	345.2	232						13	93		127		15		3		1	
4	6	6	1.3	1									1							



TABLE A-44 continued  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TRAVIS AIR FORCE BASE  
LOGISTICS, CENTER GROUND MISSION  
DATA SAMPLE

U-28-A BLOCK	WIND TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR 0.8	0.9	DISTRIBUTION (%)	1.1	1.2	1.3	1.4	1.5	1.6	2.0	2.5	3.0
4 7 3	9.0	0																	
4 7 4	21.0	144																	
4 7 5	754.0	800																	
4 7 6	270.0	417																	
4 8 2	1.0	0																	
4 8 3	4.0	0																	
4 8 4	633.6	916																	
4 8 5	2751.7	760																	
4 8 6	2.0	0																	
4 9 4	5404.9	2423																	
4 9 5	3021.1	1949																	
4 10 3	6.0	2																	
4 10 4	14975.6	6423																	
4 10 5	272.7	70																	
5 1 1	0.4	0																	
5 1 2	49.4	107																	
5 1 3	32.1	150																	
5 1 4	8.4	40																	
5 1 5	0.9	0																	
5 2 2	11.9	26																	
5 2 3	37.9	84																	
5 2 4	23.9	119																	
5 2 5	21.9	101																	
5 2 6	0.3	0																	
5 3 2	14.6	10																	
5 3 3	63.4	73																	
5 3 4	42.1	147																	
5 3 5	134.3	303																	
5 3 6	3.4	0																	
5 4 2	1.2	5																	
5 4 3	63.7	77																	
5 4 4	29.1	13																	
5 4 5	293.5	380																	
5 4 6	4.7	0																	
5 5 4	8.3	13																	
5 5 5	337.1	232																	
5 5 6	3.0	6																	
5 6 4	12.0	4																	
5 6 5	400.2	192																	
5 6 6	1.7	0																	
5 7 4	14.5	100																	
5 7 5	736.0	705																	
5 7 6	0.3	1																	
5 8 3	1.0	0																	
5 8 4	937.0	301																	
5 8 5	1914.9	431																	
5 9 4	3714.0	1459																	
5 9 5	4934.1	2441																	
5 10 4	9931.5	1903																	
5 10 5	252.0	16																	
6 1 1	30.4	29																	
6 1 3	41.7	69																	
6 1 4	9.0	36																	
6 1 5	1.1	3																	
6 2 2	2.4	0																	
6 2 3	29.7	30																	
6 2 4	19.5	30																	
6 2 5	11.2	37																	
6 3 2	2.0	3																	
6 3 3	17.9	24																	
6 3 4	27.7	34																	
6 3 5	100.4	194																	
6 3 6	4.2	7																	
6 4 3	20.3	19																	
6 4 4	40.6	37																	
6 4 5	105.0	220																	
6 4 6	2.3	0																	
6 5 4	3.3	0																	
6 5 5	202.2	111																	
6 5 6	4.0	0																	
6 6 4	4.5	0																	
6 6 5	254.0	91																	
6 6 6	2.0	0																	
6 7 4	8.0	0																	
6 7 5	392.0	140																	
6 7 6	1.0	0																	
6 8 5	33.5	3																	
6 9 5	450.0	107																	
6 9 6	213.2	13																	
6 9 7	973.3	96																	
6 10 4	741.9	32																	
6 10 5	37.5	20																	
TOTAL	74737.2	36147	0	0	24	53	170	1232	12000	10940	1033	205	77	13	2	0	0	0	0



TABLE A-6  
DISTRIBUTION OF GUST AREA FACTORS  
FOR THE  
THAMES AREA SEARCH DATA  
LOGISTICS, LONG RANGE MISSION  
DATA SAMPLE

U-BOAT-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
2 1 2	2.1	3																
2 2 2	1.9	0																
2 2 3	0.5	0																
2 3 2	2.0	2																
2 3 3	1.0	1																
2 4 2	0.5	0																
2 4 3	3.0	3																
2 4 4	0.0	0																
2 4 4	0.7	0																
2 5 3	1.5	1																
2 6 3	1.5	0																
2 7 4	0.5	0																
2 7 4	0.5	1																
3 1 2	74.7	30																
3 1 3	3.0	1																
3 2 2	66.2	43																
3 2 3	54.7	34																
3 2 4	19.7	34																
3 3 2	44.2	20																
3 3 3	71.4	101																
3 3 4	71.3	120																
3 3 4	16.0	69																
3 3 6	0.0	1																
3 4 2	1.5	0																
3 4 3	21.3	1																
3 4 4	50.1	31																
3 4 4	62.9	29																
3 4 6	1.0	0																
3 5 3	3.3	1																
3 5 4	22.2	0																
3 5 4	73.0	21																
3 5 6	3.1	1																
3 6 4	9.0	4																
3 6 4	81.4	10																
3 6 4	0.3	0																
3 7 4	18.0	7																
3 7 4	94.7	71																
3 7 4	127.3	14																
3 8 3	74.3	40																
3 9 3	0.4	0																
3 9 4	534.2	351																
3 9 4	291.4	252																
3 10 3	32.0	0																
3 10 4	2674.0	901																
3 10 4	28.0	103																
4 8 4	299.0	104																
4 9 3	12.0	0																
4 9 4	1233.3	243																
4 9 4	931.0	163																
4 10 3	16.0	0																
4 10 4	6649.0	1704																
4 10 4	107.0	0																
5 3 3	0.3	0																
5 4 3	3.0	0																
5 4 3	0.3	0																
5 7 3	29.0	4																
5 8 4	504.0	65																
5 8 4	79.3	2																
5 9 4	2039.7	490																
5 9 4	1521.9	494																
5 10 4	4701.3	1500																
5 10 4	197.1	19																
6 1 2	19.0	13																
6 1 3	21.4	35																
6 1 4	9.9	10																
6 2 2	1.3	4																
6 2 3	0.0	21																
6 2 4	7.1	25																
6 2 4	8.9	35																
6 3 3	7.2	14																
6 3 4	10.1	16																
6 3 4	62.0	110																
6 3 4	9.3	17																
6 4 3	4.3	9																
6 4 4	9.4	16																
6 4 4	91.3	109																
6 4 6	0.0	4																
6 5 4	1.0	0																
6 6 3	112.7	142																
6 6 4	144.3	92																
6 6 4	1.0	0																
6 7 3	209.2	87																
6 7 4	5.5	1																
6 8 4	61.3	31																
6 8 4	205.3	60																
6 9 4	295.0	135																
6 9 4	604.7	710																
6 10 4	326.3	71																
6 10 4	37.0	19																
TOTAL	29466.4	9099																



TABLE A-44  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TRAVIS AIR FORCE BASE  
TRAINING REGION  
DATA SAMPLE

U-NO-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)															
			-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.5	1.6	2.0	2.5	3.0
2	1	14.6																
2	1	903.1						3	15	313	446	36	2					
2	1	121.6						8	129	164	19							
2	1	15.4						29	76	90	24	4	2					
2	1	31.3						115	325	336	96	27	2					
2	1	0.4																
2	1	0.2																
2	2	764.0						2	17	261	400	19	2					
2	2	337.4						2	23	199	266	25	5					
2	2	94.0						1	3	22	193	44	5					
2	2	97.3						1	3	12	94	111	13	2	2			
2	2	0.7																
2	2	395.2								9	90	114	6					
2	2	313						1		11	126	153	10	3	1			
2	2	322.3								4	10	141	105	24	2	1		
2	2	95.0						2		0	72	66	12	2	1	1		
2	2	0.9								1	1	2						
2	2	1.5																
2	2	12.2								2	3	10	3					
2	2	91.1						1		11	35	47	5	1				
2	2	45.0									14	24	1					
2	2	0.5																
2	2	24.7								1	12	11	1					
2	2	41.8									9	13	6	1				
2	2	2.0																
2	2	2.0																
2	2	22.3								2	2	8	2					
2	2	67						1		2	27	30	6		1			
2	2	54.9									10	23	3					
2	2	37.4									2	11	2					
2	2	66.3									34	23	6	2				
2	2	91.8								1	4	22						
2	2	67.0										1						
2	2	0.0																
3	1	16.0																
3	1	1909.9						4	41	929	1493	131	5					
3	1	446.0						9	44	485	699	74	8					
3	1	152.0						2	12	74	413	600	149	23	5			
3	1	206.9						0	36	195	576	750	268	53	9			
3	2	1.7																
3	2	2026.3						1		33	690	1002	92	3				
3	2	1562.0						1	7	77	740	1123	103	12	2			
3	2	291.2						3	7	45	347	493	100	21	4			
3	2	227.4						1	4	32	236	311	59	20	2			
3	2	6.7									1	2						
3	2	0.2																
3	2	366.7								7	142	202	14	1				
3	2	2149.3								2	30	531	761	8	1			
3	2	1674.6						6	15	119	947	1165	213	24	3			
3	2	967.7						4	15	92	906	957	154	29	9	1		
3	2	16.3								1	13	23	1					
3	2	15.2																
3	2	162.3									14	20	2					
3	2	979.7								1	29	210	239	39	4	1		
3	2	980.1						2	5	53	343	429	62	13	5			
3	2	11.7																
3	2	36.5																
3	2	33.3									11	15	2					
3	2	402.0								2	22	190	222	37	6	1	1	
3	2	607.2						2	3	34	291	339	40	8	4			
3	2	4.7								1	4	2						
3	2	80.0									2							
3	2	107.0								2	40	57	1					
3	2	1133.4						2	44	349	373	49	9	2				
3	2	690.4						1	29	237	286	24	4	2				
3	2	8.5									3	4						
3	2	11.0																
3	2	460.0								3	59	74	3	2				
3	2	1043.0								10	161	216	12	1	1			
3	2	441.7								6	92	101	5					
3	2	0.9																
3	2	0.3																
3	2	14.0																
3	2	313.1								1	37	50	8		1		1	
3	2	0.7																
3	2	179.4																
3	2	166.3																
3	2	500.7								3	23	49	1					
4	1	0.9																
4	1	91.9								9	82	170	21					
4	1	79.0								9	104	119	14	1	3			
4	1	22.1								0	30	54	14	3				
4	1	4.5								2	5	4						
4	1	73.7									49	75	7					
4	1	310.4								1	16	107	166	19				
4	1	40.0									7	88	20	5	1			
4	1	32.4								2	10	34	49	15	6	3		
4	1	29.0									1	10	1					
4	1	171.2								2	5	66	109	20	3	1		
4	1	210.0								1	27	193	234	51	5	3		
4	1	230.4								6	20	170	244	41	10			
4	1	2.7																
4	1	21.4								1	4	5						
4	1	64.1								1	3	16	30	2	1	1		
4	1	200.0								1	0	66	110	11				
4	1	3.4																
4	1	0.2																
4	1	12.0																
4	1	29.0																
4	1	40.0																



TABLE A46 continued  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TRANSAL AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

U-W-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																
			-0.3	0.0	0.3	0.4	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.3	3.0	
4 5 5	143.2	44						1	20	30	1								
4 5 6	2.4	3						1		2									
4 6 2	16.9	0																	
4 6 3	24.6	1							1										
4 6 4	68.8	44							30	10									
4 6 5	171.0	80						1	39	37	2		1						
4 6 6	3.0	0																	
4 7 3	18.0	0																	
4 7 4	75.3	20							12	8									
4 7 5	262.3	93							40	40	1								
4 7 6	2.0	1								1									
4 8 3	7.0	0																	
4 8 4	7.0	0																	
4 8 5	60.5	11							3	0									
4 9 4	236.3	87							20	43	9	1							
4 9 5	133.9	38							13	20	2								
4 10 4	520.0	199					1	7	60	110	10	1							
4 10 5	3.0	0																	
5 1 1	0.3	0																	
5 1 2	14.9	11							0	9									
5 1 3	41.2	12							0	9	1								
5 1 4	2.3	0							1	4		1							
5 2 2	10.5	3							2	1									
5 2 3	7.9	0																	
5 2 4	0.1	2								2									
5 2 5	0.4	0																	
5 3 2	0.3	0																	
5 3 3	13.1	1							1										
5 3 4	13.2	3						1	1	1									
5 3 5	3.4	0							1										
5 3 6	0.3	0																	
5 4 3	1.0	0																	
5 4 4	7.3	2							1	1									
5 4 5	11.9	45						2	11	25	9	2							
5 4 6	0.3	2					1		1	1									
5 5 4	2.3	1							1										
5 5 5	13.5	32							11	13	6	2							
5 6 3	0.2	0																	
5 6 4	10.0	3							1		2								
5 6 5	14.2	27							10	14	3								
5 7 3	31.3	24						1	10	11	2								
5 8 5	22.0	31						1	14	10									
5 8 6	0.2	0																	
5 9 3	10.0	0																	
5 9 4	216.7	1								1									
5 9 5	127.0	74					1	2	24	39	6	2							
5 10 4	100.0	6							1	9									
5 10 5	2.0	1								1									
6 1 2	3.1	0																	
6 1 3	3.4	1								1									
6 1 4	1.2	0																	
6 1 5	0.2	0																	
6 2 2	1.0	0																	
6 2 3	3.4	0																	
6 2 4	0.3	0																	
6 2 5	0.6	0																	
6 3 3	3.3	2								2									
6 3 4	7.3	0																	
6 3 5	6.3	4							1	2	1								
6 4 4	6.3	0																	
6 4 5	9.5	4																	
6 5 5	3.3	0																	
6 6 5	0.3	0																	
6 7 5	0.3	0																	
6 8 5	12.5	0																	
6 9 4	0.2	0																	
6 9 5	0.3	1																	
TOTAL	28227.6	33910	0	1	4	47	705	1506	12340	16075	2400	537	75	3	1	0	0	0	

TABLE A47  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TRANSAL AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

U-W-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																
			-0.3	0.0	0.3	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.3	3.0	
4 1 2	1.4	12								1									
4 1 3	0.3	3								1									
4 1 4	0.3	0																	
4 2 2	1.0	0																	
4 2 3	3.3	24							1		1								
4 2 4	0.3	3								1									
4 2 5	3.1	25							1		1								
4 3 3	7.9	50								1	1								
4 3 4	14.7	9																	
4 3 5	1.0	1																	
4 4 0	2.0	1																	
TOTAL	39.9	104	0	0	0	0	0	2	39	45	4	0	0	0	0	0	0	0	



TABLE A48  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
CHARLESTON AIR FORCE BASE  
LOGISTICS, MEDIUM RANGE MISSION  
DATA SAMPLE

WIND- DIRECTION	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																
			-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35
2 1 2	2.1	0																	
2 2 2	10.8	10																	
2 3 2	2.6	0																	
2 3 2	44.0	0																	
2 3 3	20.2	0																	
2 3 4	3.9	0																	
2 3 5	1.0	0																	
2 4 4	10.4	2																	
2 4 5	10.6	0																	
2 5 5	20.4	0																	
2 6 5	20.7	1																	
2 7 5	20.8	1																	
2 8 5	45.8	0																	
2 9 4	7.3	0																	
2 9 5	14.6	0																	
2 10 4	127.3	0																	
2 10 5	100.1	0																	
3 1 2	211.7	277							17	31	67	59	66	26	8	2	1		
3 1 3	93.9	41							1	9	13	12	7	2	1				
3 1 4	19.2	3										2	1						
3 2 2	490.3	934																	
3 2 3	147.5	107																	
3 2 4	77.4	20																	
3 2 5	10.9	9																	
3 3 2	330.9	292																	
3 3 3	770.4	403																	
3 3 4	377.9	210																	
3 3 5	309.0	20																	
3 4 2	26.9	0																	
3 4 3	102.3	126																	
3 4 4	301.8	142																	
3 4 5	922.7	104																	
3 4 6	22.9	0																	
3 5 3	0.9	0																	
3 5 4	100.3	33																	
3 5 5	1130.7	109																	
3 6 5	1030.0	71																	
3 6 6	27.5	7																	
3 7 3	12.9	6																	
3 7 4	193.4	70																	
3 7 5	2025.4	440																	
3 7 6	29.0	0																	
3 8 4	100.3	14																	
3 8 5	2404.7	60																	
3 8 6	7.5	0																	
3 9 3	9.0	0																	
3 9 4	4547.3	364																	
3 9 5	9105.7	94																	
3 10 3	120.6	1																	
3 10 4	24525.0	147																	
3 10 5	1541.0	7																	
4 1 2	167.6	174																	
4 1 3	103.6	200																	
4 1 4	7.6	20																	
4 1 5	0.4	0																	
4 2 2	213.0	107																	
4 2 3	103.9	101																	
4 2 4	72.3	66																	
4 2 5	21.0	21																	
4 2 6	0.6	0																	
4 3 2	100.5	126																	
4 3 3	603.5	430																	
4 3 4	390.0	367																	
4 3 5	382.7	109																	
4 3 6	20.7	6																	
4 4 2	0.7	42																	
4 4 3	130.6	91																	
4 4 4	604.7	301																	
4 4 5	1221.0	310																	
4 4 6	63.6	6																	
4 5 3	2.0	0																	
4 5 4	140.8	10																	
4 5 5	1427.2	94																	
4 5 6	31.5	2																	
4 6 4	67.0	19																	
4 6 5	1003.4	67																	
4 6 6	96.5	0																	
4 7 3	9.1	0																	
4 7 4	210.6	23																	
4 7 5	3070.5	71																	
4 7 6	101.1	2																	



TABLE A48 conclude  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
CHARLESTON AIR FORCE BASE  
LOGISTICS, MEDIUM RANGE MISSION  
DATA SAMPLE

M-HH-A BLOCK	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
			-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35			
9 3 3	102.2	30																				
9 3 4	143.0	64																				
9 3 5	201.9	63																				
9 3 6	11.0	7																				
9 4 4	19.2	5																				
9 4 5	650.9	107																				
9 4 6	42.5	0																				
9 5 4	11.9	0																				
9 5 5	011.0	71																				
9 5 6	47.7	1																				
9 6 4	7.6	0																				
9 6 5	1173.4	9																				
9 6 6	23.6	1																				
9 7 4	5.0	0																				
9 7 5	1011.1	56																				
9 7 6	7.1	0																				
9 8 4	65.1	3																				
9 8 5	6005.2	50																				
9 9 4	31695.0	361																				
9 9 5	21706.4	391																				
9 10 4	56103.7	724																				
9 10 5	3509.0	0																				
0 1 2	36.4	72																				
0 1 3	116.0	143																				
0 1 4	11.2	11																				
0 1 5	0.9	0																				
0 2 2	4.9	0																				
0 2 3	65.4	43																				
0 2 4	45.9	85																				
0 2 5	24.0	33																				
0 3 2	4.0	0																				
0 3 3	93.0	40																				
0 3 4	132.9	90																				
0 3 5	365.5	301																				
0 3 6	10.9	40																				
0 4 3	11.1	0																				
0 4 4	0.9	0																				
0 4 5	705.5	90																				
0 4 6	40.0	9																				
0 5 3	1.9	0																				
0 5 4	9.1	0																				
0 5 5	001.2	94																				
0 5 6	9.3	2																				
0 6 5	1131.0	19																				
0 7 4	9.0	0																				
0 7 5	1340.0	57																				
0 8 4	110.0	2																				
0 8 5	3369.2	52																				
0 9 4	4101.5	42																				
0 9 5	0267.7	53																				
0 10 4	3900.1	11																				
0 10 5	114.1	0																				
TOTAL	370055.1	12944	0	0	1	4	17	36	101	312	905	3169	4720	1639	645	243	79	10	11	1	1	0



TABLE A49  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
CHARLESTON AIR FORCE BASE  
LOGISTICS, LONG RANGE MISSION  
DATA SAMPLE

U-MH-0 BLOCK	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
3 1 2	4.7	17								1	1	3	3	4	1	1						
3 2 1	4.4	14								1	1	6	3	4	2							
3 3 1	9.6	11								2	1	2	4	2								
3 3 3	12.3	15								1		8	6									
3 3 4	20.2	2										1	1									
3 4 4	9.1	0																				
3 4 5	23.6	0																				
3 5 5	25.6	0																				
3 6 5	30.4	1										1										
3 7 5	42.9	0																				
3 8 5	28.3	0																				
3 9 4	20.9	0																				
3 9 5	10.8	0																				
3 10 4	2728.5	0										4	4									
4 10 3	17.9	1											1									
4 10 4	4509.2	25										15	8	2								
5 9 4	297.8	0																				
5 9 5	1530.2	1										1										
5 10 4	2663.9	1										1										
5 10 5	6.1	0																				
6 1 3	1.4	2									1											
6 2 2	2.4	3									1											
6 2 3	5.8	7								2				2	3							
6 2 4	0.0	0																				
6 3 3	3.8	3									1											
6 3 4	7.7	4								1		1	1	2		1						
6 3 5	13.4	9									1	1	1	4								
6 4 5	37.4	14									1	4	8	1								
6 5 4	1.3	0																				
6 5 5	52.4	3											2	1								
6 6 6	6.1	0																				
6 6 7	10.8	0																				
6 6 8	48.9	0																				
6 7 4	6.0	0																				
6 7 5	77.5	15										5	10									
6 8 5	104.0	55							3	3	3	10	20	4		4						
6 9 4	146.2	0																				
6 9 5	350.3	0																				
6 10 4	193.3	5										3	2									
TOTAL	13396.9	210	0	0	0	0	0	0	5	9	14	78	77	25	4	6	0	0	0	0	0	0



TABLE A50  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
CHARLESTON AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

N-MH-A BLOCK	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																							
			-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30-35					
2 1 1	19.0	4						1																		
2 1 2	895.7	2234				6	4	18	55	144	252	444	510	480	212	100	20	17	6							
2 1 3	159.9	390				2	1	2	13	27	39	100	91	50	34	15	4	2		1						
2 1 4	4.7	0																								
2 1 5	4.6	1																								
2 2 1	2.9	1																								
2 2 2	1471.0	1009				2	4	9	29	81	223	440	545	3-3	140	40	17	5	2	1						
2 2 3	986.8	1368				1	1	7	11	40	124	332	434	255	108	27	9	5	6							
2 2 4	319.0	279				1			8	13	34	70	76	49	18	9	2	1								
2 2 5	23.4	3																								
2 2 6	7.9	0																								
2 3 1	1.7	1																								
2 3 2	624.7	279						2		8	25	69	98	47	20	9			1							
2 3 3	614.6	399							5	10	32	107	152	54	29	8		1								
2 3 4	208.1	134								3	12	41	57	9	6	3		1								
2 3 5	101.3	110							1	3	6	22	51	19	5	2										
2 3 6	9.2	0																								
2 4 4	54.8	4									1	2	1													
2 4 5	133.7	14									1	2	9	1	1											
2 4 6	3.4	0																								
2 5 4	44.8	5										2	3													
2 5 5	112.9	4																								
2 6 4	45.0	11										4	5	2												
2 6 5	116.9	9										4	5													
2 6 6	1.3	1											1													
2 7 3	80.7	29									1	14	13	1												
2 7 4	385.9	79							1		5	33	37	3												
2 7 5	617.1	11										4	7													
2 8 3	26.0	2											1	1												
2 8 5	233.0	2																								
2 9 4	3.4	0																								
2 9 5	131.9	0																								
2 10 4	740.9	1											1													
2 10 5	3.0	0																								
3 1 1	12.4	13																								
3 1 2	1915.4	5272							1	6	23	92	117	300	742	968	1166	993	515	210	96	49	21	4		
3 1 3	700.3	1020									1	7	11	35	93	254	429	473	290	139	61	14	9	2		
3 1 4	68.1	96													4	4	40	29	13	2	2	1				
3 1 5	257.2	83													1	5	27	37	12	1	1					
3 2 1	22.2	16																								
3 2 2	2003.0	2794																								
3 2 3	3482.0	4589																								
3 2 4	622.4	764																								
3 2 5	730.7	657																								
3 2 6	1.0	2																								
3 3 1	6.0	0																								
3 3 2	740.1	554																								
3 3 3	2604.7	1968																								
3 3 4	1264.1	868																								
3 3 5	999.3	466																								
3 3 6	79.2	16																								
3 4 2	20.2	4																								
3 4 3	164.3	15																								
3 4 4	399.1	179																								
3 4 5	999.2	147																								
3 4 6	40.9	12																								
3 5 2	5.7	0																								
3 5 3	25.4	3																								
3 5 4	397.4	79																								
3 5 5	1075.5	70																								
3 5 6	18.3	0																								
3 6 3	224.1	6																								
3 6 4	1429.9	134																								
3 6 5	2250.2	115																								
3 6 6	22.6	4																								
3 7 3	934.4	39																								
3 7 4	3306.6	164																								
3 7 5	3457.1	233																								
3 7 6	84.6	0																								
3 8 3	130.6	9																								
3 8 4	261.2	17																								
3 8 5	1496.9	56																								
3 9 3	5.4	0																								
3 9 4	231.0	0																								
3 9 5	1763.4	28																								
3 10 3	5.4	0																								
3 10 4	2920.9	10																								
3 10 5	269.5	0																								
4 1 1	6.1	3																								
4 1 2	175.4	605																								
4 1 3	115.7	272																								
4 1 4	7.3	17																								
4 1 5	3.5	10																								
4 2 2	159.8	130																								
4 2 3	272.2	247																								
4 2 4	150.2	166																								
4 2 5	131.4	81																								
4 2 6	11.5	20																								
4 3 2	159.5	110																								



TABLE A51  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
CHARLESTON AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

W-W-A BLOCK	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35			
4 5 6	22.1	2											2									
4 6 3	110.4	2									1	1										
4 6 4	881.1	43									21	10	3	1								
4 6 5	1320.1	63							1	3	10	35	3	3								
4 6 6	11.3	0																				
4 7 2	10.2	0																				
4 7 3	479.7	92							1	8	29	39	14	1								
4 7 4	1200.0	81							1	4	25	39	11	1								
4 7 5	2254.6	62								2	16	37	6	1								
4 7 6	61.2	0																				
4 8 3	95.1	2										2										
4 8 4	72.0	4									2	4										
4 8 5	830.0	11								1	4	4	1	1								
4 8 6	3.0	0																				
4 9 4	170.1	2										1	1									
4 9 5	400.1	0																				
4 10 4	272.0	3								1	1	1										
4 10 5	7.0	0																				
TOTAL	30456.6	31469	0	0	1	29	63	160	403	1373	3531	7402	9364	5325	2250	890	304	127	55	14	2	0

TABLE A51  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
CHARLESTON AIR FORCE BASE  
MISCELLANEOUS MISSION  
DATA SAMPLE

W-W-A BLOCK	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35			
2 1 1	1.1	0																				
2 1 2	43.6	37																				
2 1 3	16.7	9																				
2 1 4	9.9	10																				
2 1 5	2.2	0																				
2 2 2	20.6	2																				
2 2 3	67.2	13																				
2 2 4	577.0	105																				
2 2 5	101.6	33																				
2 2 6	31.5	6																				
2 3 4	23.0	7																				
2 3 5	131.0	17																				
2 3 6	14.4	1																				
3 1 2	39.7	5																				
3 1 3	14.2	1																				
3 1 4	146.8	31																				
3 1 5	1113.0	231																				
3 2 2	272.0	12																				
3 2 3	397.1	21																				
3 2 4	762.0	192																				
3 2 5	1492.2	406																				
3 2 6	15.3	3																				
3 3 2	29.7	4																				
3 3 3	50.2	1																				
3 3 4	333.3	63																				
3 3 5	810.1	120																				
3 3 6	13.6	5																				
3 4 4	214.0	15																				
3 4 5	476.0	24																				
3 4 6	9.7	3																				
3 5 4	115.0	3																				
3 5 5	416.7	30																				
3 5 6	6.7	1																				
3 6 4	76.7	7																				
3 6 5	601.0	33																				
3 6 6	13.2	0																				
3 7 4	60.5	0																				
3 7 5	470.2	2																				
3 7 6	3.5	0																				
4 1 2	11.3	31																				
4 1 3	16.1	95																				
4 1 4	36.4	29																				
4 1 5	101.2	90																				
4 2 2	9.5	0																				
4 2 3	11.3	1																				
4 2 4	69.6	14																				
4 2 5	175.0	82																				
4 2 6	13.6	10																				
4 3 4	223.2	35																				
4 3 5	357.3	20																				
4 3 6	7.1	4																				
4 4 4	46.5	4																				
4 4 5	282.0	16																				
4 4 6	35.0	0																				
4 5 4	79.7	22																				
4 5 5	450.0	14																				
4 5 6	20.0	1																				
4 6 4	5.0	0																				
4 6 5	479.7	10																				
4 6 6	12.0	0																				
4 7 5	101.0	2																				
TOTAL	11011.0	1009	0	0	0	0	3	3	15	27	126	609	669	179	54	15	4	3	1	1	0	0



TABLE A31  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
CHARLESTON AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

WIND- DIRECTION	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	-2.5	+2.5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35
3 1 2	5.7	7																			
3 2 2	2.5	2																			
3 2 3	0.4	4																			
3 2 4	7.1	1																			
3 3 4	30.7	1																			
4 1 2	4.3	20																			
4 1 3	2.0	6																			
4 1 4	0.7	1																			
4 2 2	0.3	62																			
4 2 3	0.6	0																			
4 2 4	1.2	6																			
4 2 5	3.8	9																			
4 3 3	41.5	12																			
4 3 4	32.1	9																			
4 3 5	47.1	5																			
4 3 6	0.6	0																			
4 4 3	13.3	0																			
4 4 4	9.3	1																			
4 4 5	34.5	3																			
4 4 6	3.7	2																			
4 5 5	0.8	0																			
4 5 6	1.2	1																			
4 6 4	1.6	1																			
4 6 5	15.5	4																			
TOTAL	205.5	162	0	0	0	0	0	2	6	13	14	30	66	79	13	4	1	1	1	0	0

TABLE A31  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
CHARLESTON AIR FORCE BASE  
ATROCIOUS THUNDER MISSION  
DATA SAMPLE

WIND- DIRECTION	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	-2.5	+2.5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35
3 1 2	3.2	5																			
3 2 2	3.4	0																			
3 2 3	5.7	0																			
3 2 4	10.5	1																			
3 2 5	30.7	0																			
3 3 4	20.2	0																			
3 3 5	34.6	0																			
3 4 5	18.9	10																			
3 5 5	20.4	1																			
4 1 2	0.8	0																			
4 1 3	0.9	0																			
4 1 4	1.1	0																			
4 2 4	2.0	0																			
4 2 5	75.4	0																			
4 3 5	71.5	0																			
TOTAL	100.7	21	0	0	0	0	0	0	0	2	2	30	2	1	0	0	0	0	0	0	0



TABLE A-4  
DISTRIBUTION OF OBSERVED VERTICAL GUST VELOCITY  
FOR THE  
SEVEN A-10 FLIGHT DATA  
LEGISTIES, 1969-70 RANGE EXTENSION  
DATA SAMPLE

[illegible]



TABLE 404 (continued)  
DISTRIBUTION OF SURFACE CURRENTS, EAST VELOCITY  
FOR THE  
GULF OF MEXICO, 1955  
LEWISVILLE, TEXAS COAST REGION  
DATE 1955

STATION	DATE	TIME	DIRECTION												SPEED
			00-05	05-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	
101.0	10/1	1000													0.0
101.0	10/1	1100													0.0
101.0	10/1	1200													0.0
101.0	10/1	1300													0.0
101.0	10/1	1400													0.0
101.0	10/1	1500													0.0
101.0	10/1	1600													0.0
101.0	10/1	1700													0.0
101.0	10/1	1800													0.0
101.0	10/1	1900													0.0
101.0	10/1	2000													0.0
101.0	10/1	2100													0.0
101.0	10/1	2200													0.0
101.0	10/1	2300													0.0
101.0	10/1	2400													0.0
101.0	10/1	2500													0.0
101.0	10/1	2600													0.0
101.0	10/1	2700													0.0
101.0	10/1	2800													0.0
101.0	10/1	2900													0.0
101.0	10/1	3000													0.0
101.0	10/1	3100													0.0
101.0	10/1	3200													0.0
101.0	10/1	3300													0.0
101.0	10/1	3400													0.0
101.0	10/1	3500													0.0
101.0	10/1	3600													0.0
101.0	10/1	3700													0.0
101.0	10/1	3800													0.0
101.0	10/1	3900													0.0
101.0	10/1	4000													0.0
101.0	10/1	4100													0.0
101.0	10/1	4200													0.0
101.0	10/1	4300													0.0
101.0	10/1	4400													0.0
101.0	10/1	4500													0.0
101.0	10/1	4600													0.0
101.0	10/1	4700													0.0
101.0	10/1	4800													0.0
101.0	10/1	4900													0.0
101.0	10/1	5000													0.0
101.0	10/1	5100													0.0
101.0	10/1	5200													0.0
101.0	10/1	5300													0.0
101.0	10/1	5400													0.0
101.0	10/1	5500													0.0
101.0	10/1	5600													0.0
101.0	10/1	5700													0.0
101.0	10/1	5800													0.0
101.0	10/1	5900													0.0
101.0	10/1	6000													0.0
101.0	10/1	6100													0.0
101.0	10/1	6200													0.0
101.0	10/1	6300													0.0
101.0	10/1	6400													0.0
101.0	10/1	6500													0.0
101.0	10/1	6600													0.0
101.0	10/1	6700													0.0
101.0	10/1	6800													0.0
101.0	10/1	6900													0.0
101.0	10/1	7000													0.0
101.0	10/1	7100													0.0
101.0	10/1	7200													0.0
101.0	10/1	7300													0.0
101.0	10/1	7400													0.0
101.0	10/1	7500													0.0
101.0	10/1	7600													0.0
101.0	10/1	7700													0.0
101.0	10/1	7800													0.0
101.0	10/1	7900													0.0
101.0	10/1	8000													0.0
101.0	10/1	8100													0.0
101.0	10/1	8200													0.0
101.0	10/1	8300													0.0
101.0	10/1	8400													0.0
101.0	10/1	8500													0.0
101.0	10/1	8600													0.0
101.0	10/1	8700													0.0
101.0	10/1	8800													0.0
101.0	10/1	8900													0.0
101.0	10/1	9000													0.0
101.0	10/1	9100													0.0
101.0	10/1	9200													0.0
101.0	10/1	9300													0.0
101.0	10/1	9400													0.0
101.0	10/1	9500													0.0
101.0	10/1	9600													0.0
101.0	10/1	9700													0.0
101.0	10/1	9800													0.0
101.0	10/1	9900													0.0
101.0	10/1	10000													0.0
101.0	10/1	10100													0.0
101.0	10/1	10200													0.0
101.0	10/1	10300													0.0
101.0	10/1	10400													0.0
101.0	10/1	10500													0.0
101.0	10/1	10600													0.0
101.0	10/1	10700													0.0
101.0	10/1	10800													0.0
101.0	10/1	10900													0.0
101.0	10/1	11000													0.0
101.0	10/1	11100													0.0
101.0	10/1	11200													0.0
101.0	10/1	11300													0.0
101.0	10/1	11400													0.0
101.0	10/1	11500													0.0
101.0	10/1	11600													0.0
101.0	10/1	11700													0.0
101.0	10/1	11800													0.0
101.0	10/1	11900													0.0
101.0	10/1	12000													0.0
101.0	10/1	12100													0.0
101.0	10/1	12200													0.0
101.0	10/1	12300													0.0
101.0	10/1	12400													0.0
101.0	10/1	12500													0.0
101.0	10/1	12600													0.0
101.0	10/1	12700													0.0
101.0	10/1	12800													0.0
101.0	10/1	12900													0.0
101.0	10/1	13000													0.0
101.0	10/1	13100													0.0
101.0	10/1	13200													0.0
101.0	10/1	13300													0.0
101.0	10/1	13400													0.0
101.0	10/1	13500													0.0
101.0	10/1	13600													0.0
101.0	10/1	13700													0.0
101.0	10/1	13800													0.0
101.0	10/1	13900													0.0
101.0	10/1	14000													0.0
101.0	10/1	14100													0.0
101.0	10/1	14200													0.0
101.0	10/1	14300													



TABLE A-1  
OF SELECTED COUNTRIES 1981-1982  
FOR THE  
OVER THE PERIOD 1981  
THROUGH 1982  
AND 1983

[illegible]



[illegible]



The image is a high-contrast, black and white scan of a document page. It is heavily degraded with numerous black specks, noise, and vertical streaks, particularly along the left edge. The text is mostly illegible due to the noise and high contrast. Some faint, vertical lines of text are visible, suggesting a list or a columnar layout. The top and bottom edges of the page are also visible, showing some faint, illegible text.

[illegible]



11/20/68 11:20 AM  
11/20/68 11:20 AM  
11/20/68 11:20 AM

0 0 0 1 2 0 12 99 142 240 200 120 71 10 7 1 0 0 1 0



TABLE 400  
DISTRIBUTION OF OBSERVED VERTICAL GUST VELOCITY

TABLE 400  
DISTRIBUTION OF OBSERVED VERTICAL GUST VELOCITY

WIND DIRECTION (DEG)	WIND SPEED (MPH)	WIND DIRECTION (DEG)	WIND SPEED (MPH)	GUST VELOCITY (MPH)												TOTAL OBSERVATIONS
				-10	-5	0	5	10	15	20	25	30	35	40	45	
0	0	0	0													1
0	1	0	0													1
0	2	0	0													1
0	3	0	0													1
0	4	0	0													1
0	5	0	0													1
0	6	0	0													1
0	7	0	0													1
0	8	0	0													1
0	9	0	0													1
0	10	0	0													1
0	11	0	0													1
0	12	0	0													1
0	13	0	0													1
0	14	0	0													1
0	15	0	0													1
0	16	0	0													1
0	17	0	0													1
0	18	0	0													1
0	19	0	0													1
0	20	0	0													1
0	21	0	0													1
0	22	0	0													1
0	23	0	0													1
0	24	0	0													1
0	25	0	0													1
0	26	0	0													1
0	27	0	0													1
0	28	0	0													1
0	29	0	0													1
0	30	0	0													1
0	31	0	0													1
0	32	0	0													1
0	33	0	0													1
0	34	0	0													1
0	35	0	0													1
0	36	0	0													1
0	37	0	0													1
0	38	0	0													1
0	39	0	0													1
0	40	0	0													1
0	41	0	0													1
0	42	0	0													1
0	43	0	0													1
0	44	0	0													1
0	45	0	0													1
0	46	0	0													1
0	47	0	0													1
0	48	0	0													1
0	49	0	0													1
0	50	0	0													1
0	51	0	0													1
0	52	0	0													1
0	53	0	0													1
0	54	0	0													1
0	55	0	0													1
0	56	0	0													1
0	57	0	0													1
0	58	0	0													1
0	59	0	0													1
0	60	0	0													1
0	61	0	0													1
0	62	0	0													1
0	63	0	0													1
0	64	0	0													1
0	65	0	0													1
0	66	0	0													1
0	67	0	0													1
0	68	0	0													1
0	69	0	0													1
0	70	0	0													1
0	71	0	0													1
0	72	0	0													1
0	73	0	0													1
0	74	0	0													1
0	75	0	0													1
0	76	0	0													1
0	77	0	0													1
0	78	0	0													1
0	79	0	0													1
0	80	0	0													1
0	81	0	0													1
0	82	0	0													1
0	83	0	0													1
0	84	0	0													1
0	85	0	0													1
0	86	0	0													1
0	87	0	0													1
0	88	0	0													1
0	89	0	0													1
0	90	0	0													1
0	91	0	0													1
0	92	0	0													1
0	93	0	0													1
0	94	0	0													1
0	95	0	0													1
0	96	0	0													1
0	97	0	0													1
0	98	0	0													1
0	99	0	0													1
0	100	0	0													1



TABLE A40 continued  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
PER 100  
TINIER 230 PERIOD 0400  
TRAFFIC MISSIOM  
DATA SAMPLE

U-000-A	NAUTICAL	TOTAL	USE DISTRIBUTION (FT./SEC.)																
0400H	MILES	PEAKS	-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35
0 1 4	1.4	4																	
0 2 1	0.9	2																	
0 2 2	1297.7	4004				1	0	17	39	125	320	615	471	510	640	572	307	127	60
0 2 3	1404.0	3391				1	4	15	54	100	407	667	754	673	342	134	53	20	5
0 2 4	274.0	207				1			3	14	27	77	113	61	10	7	4	2	
0 2 5	0.9	0																	
0 3 2	2115.3	4777				2	9	20	45	112	353	601	754	739	1010	504	237	70	32
0 3 3	2344.0	12342				1	5	31	55	214	670	1747	2405	2674	2520	1211	445	170	64
0 3 4	2616.9	3544					4	0	11	45	119	370	653	1202	630	200	74	40	11
0 3 5	401.1	555				1		4	3	11	19	40	121	100	95	31	16	5	2
0 3 6	33.3	0																	
0 3 7	74.0	0																	
0 4 3	1369.7	1505																	
0 4 4	1276.1	300																	
0 4 5	2773.6	540				1													
0 4 6	53.3	1																	
0 4 7	37.3	0																	
0 5 3	540.6	40																	
0 5 4	1140.7	200																	
0 5 5	3026.7	325																	
0 5 6	114.6	10																	
0 6 2	61.3	0																	
0 6 3	542.2	24																	
0 6 4	2003.2	100																	
0 6 5	6019.7	200																	
0 6 6	110.3	12																	
0 7 2	19.1	0																	
0 7 3	613.4	30																	
0 7 4	4543.4	100																	
0 7 5	9755.7	410																	
0 7 6	100.2	4																	
0 8 3	63.0	2																	
0 8 4	114.3	0																	
0 8 5	990.5	20																	
0 8 6	7.7	0																	
0 9 3	162.0	7																	
0 9 4	90.5	2																	
0 9 5	767.2	1																	
0 10 4	240.2	5																	
0 1 2	40.0	54																	
0 1 3	29.0	70																	
0 2 2	149.5	270																	
0 2 3	240.3	393																	
0 2 4	54.4	31																	
0 3 2	212.1	430																	
0 3 3	1470.2	1074																	
0 3 4	543.0	544																	
0 3 5	220.2	122																	
0 4 3	102.0	25																	
0 4 4	300.7	40																	
0 4 5	640.2	142																	
0 4 6	21.0	2																	
0 5 3	160.0	20																	
0 5 4	330.0	70																	
0 5 5	1043.5	110																	
0 5 6	25.3	3																	
0 6 2	6.7	0																	
0 6 3	323.6	2																	
0 6 4	1352.0	135																	
0 6 5	1073.5	102																	
0 6 6	40.3	3																	
0 7 3	900.0	5																	
0 7 4	3244.7	00																	
0 7 5	4327.5	252																	
0 7 6	76.0	2																	
0 8 4	90.3	7																	
0 8 5	140.6	10																	
0 8 6	1.5	0																	
0 9 3	42.3	0																	
0 9 4	274.3	5																	
0 9 5	133.2	3																	
0 10 4	273.0	4																	
0 10 5	110.1	1																	
TOTAL	417093.4	217400	1	5	25	143	347	944	3049	9560	26106	50951	62221	36413	16104	60112227	702	351	45



TABLE A41  
DISTRIBUTION OF DERIVED VERTICAL JUMP VELOCITY  
FOR THE  
LIMBER AIR FORCE DATA  
FLIGHT TEST REGION  
DATA SAMPLE

U-M-A BLOCK	NAUTICAL MILES	TOTAL PEAKS	USE DISTRIBUTION (FT./SEC.)																			
			-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
3 2 2	3.3	6								1	1			2								
3 3 2	27.7	91							1	3	4	34	2	6		6	20	4				
3 3 3	45.2	69							1	1	7	20	11	17	11	2						
3 3 4	15.6	38								3	4	13	13	2	1	1	1					
3 3 5	2.4	1																				
3 3 6	2.7	1																				
3 4 1	29.3	1														1						
3 4 4	4.1	1																				
3 4 5	2.8	1																				
3 4 6	8.5	1																				
3 5 4	7.2	1																				
3 5 5	1.1	1																				
3 5 6	9.3	1																				
3 6 4	18.5	2										3										
3 6 5	14.1	1											1		1							
3 7 3	16.1	1																				
3 7 4	39.8	5																				
3 7 5	64.4	5										1		4								
3 8 4	41.8	5																				
3 8 5	15.7	3																				
3 9 3	28.8	1																				
3 9 4	170.8	1																				
3 9 5	7.2	1																				
3 10 3	49.3	1																				
3 10 4	193.3	1																				
3 10 5	7.9	1											1									
4 2 2	1.6	4																				
4 2 3	1.2	1										1										
4 2 4	1.1	1																				
4 3 1	1.4	3																				
4 3 4	5.6	5																				
4 4 3	7.1	1										1										
4 4 4	4.9	1														1						
4 4 5	17.8	1										1	1	1	1							
4 5 3	21.8	1																				
4 5 4	29.4	1										1	3	2								
4 5 5	16.8	1																				
4 6 4	9.9	1																				
4 7 3	4.3	1																				
4 7 4	147.9	1										1	2	1								
4 8 4	2.1	1																				
TOTAL	1107.6	299	0	0	0	0	0	0	1	0	22	83	90	37	19	32	7	0	0	0	0	0



TABLE A62  
DISTRIBUTION OF SURFACE VERTICAL GUST VELOCITY  
FOR THE  
TRAVERSE AND FURROW BASIN  
LOUISIANA, GULF OF MEXICO REGION  
DATA SAMPLE

U-M-A BLOCK	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35
2 1 2	20.0	20							1	3	5	10	8	1					
2 1 3	6.7	1										1							
2 2 1	6.3	3								1	1	1							
2 2 2	42.3	30							1		1	21	7						
2 2 3	2.3	3									1	1							
2 3 2	95.0	27							2	2	5	12	5						
2 3 3	94.7	63							1	3	8	10	20	5	1				
2 3 4	97.0	1										1							
2 3 5	9.0	0																	
2 4 2	5.1	0																	
2 4 3	26.1	1										1							
2 4 4	50.4	1										1							
2 4 5	121.2	2									2								
2 5 2	6.9	0																	
2 5 4	4.3	0																	
2 5 5	90.7	4										3	1						
2 5 6	3.0	1										1							
2 6 3	5.4	0																	
2 6 5	79.6	1										1							
2 6 6	13.9	0																	
2 7 3	24.4	0																	
2 7 4	25.6	0																	
2 7 5	95.0	0																	
2 7 6	20.6	0																	
2 8 4	9.4	0																	
2 8 5	447.4	0																	
2 8 6	24.3	0																	
2 9 4	52.0	0																	
2 9 5	119.3	0																	
2 10 4	600.0	0																	
2 10 5	125.4	0																	
3 1 2	260.9	331	1	1		7	11	32	59	100	61	27	11						
3 1 3	95.9	32						2	11	7	9	3							
3 1 4	0.7	0																	
3 1 7	2.4	12						1	3	4	3	1							
3 2 2	972.0	445				9	25	52	92	121	114	26	7						
3 2 3	211.0	115						2	6	43	37	21	3						
3 2 4	42.0	29						1	4	12	10	5							
3 2 5	14.0	33							8	14	5	1							
3 3 2	479.0	234	1			2	12	30	64	70	36	15	4						
3 3 3	904.0	201				1	4	11	23	60	119	40							
3 3 4	753.7	109						2	17	57	88	22							
3 3 5	952.0	93				1		2	16	26	8								
3 3 6	19.3	0								5	1								
3 4 2	40.3	23						1	4	2	9								
3 4 3	390.0	224						3	6	27	60	40	10	3					
3 4 4	810.9	137							3	9	30	61	12	7					
3 4 5	1255.0	135				2		2	12	47	51	14	2	3					
3 4 6	69.3	15	1						3	10	1								
3 5 3	41.3	0																	
3 5 4	109.0	22							1	9	11	1							
3 5 5	1400.7	49							5	13	24	3	2	1					
3 5 6	55.5	12							3	1	4	1	2						
3 6 3	31.2	0																	
3 6 4	220.4	23						3	2	10	1	3	2	2					
3 6 5	2149.2	29				1				6	20	2							
3 6 6	69.2	0																	
3 7 3	91.0	0																	
3 7 4	230.0	79						1	3	8	20	21	14	3	1				
3 7 5	3502.6	105							5	41	50	5	2						
3 7 6	1176.6	9							1	3	5								
3 8 3	26.4	0																	
3 8 4	214.9	0																	
3 8 5	7309.7	30							4	12	14								
3 8 6	30.1	0																	
3 9 2	16.2	0																	
3 9 3	615.9	0																	
3 9 4	12772.0	45							2	19	21	2	1						
3 9 5	12059.6	220						3	5	6	20	60	23	11	5	2	3	1	1
3 10 3	19.3	1									1								
3 10 4	41617.6	204							1	15	94	169	13	3					
3 10 5	994.6	1										1							
4 1 1	0.7	0																	
4 1 2	163.0	295						3	5	17	41	32	44	61	27	13	9	2	1
4 1 3	45.0	79							1	7	9	19	16	13	9	3	1	1	
4 1 4	23.2	63							1	1	8	17	19	7	6	3			
4 1 5	6.2	15									2	3	4	2	2	2			
4 2 2	241.2	242						3	4	14	30	43	66	44	21	6	6	1	
4 2 3	226.6	102							1	2	15	20	27	15	7	4	2	1	
4 2 4	35.1	49								1	5	8	14	10	8	3			
4 2 5	42.0	95								4	5	12	10	9	2	3			
4 3 2	209.4	205						1	4	8	19	32	24	40	41	18	4	3	1
4 3 3	503.8	317							3	5	25	40	61	100	49	24	7	2	1
4 3 4	302.4	163								2	10	45	74	22	6	3	1		
4 3 5	417.6	199							1	3	6	8	34	67	21	14	2	1	
4 3 6	10.2	1																	
4 4 2	10.7	16						1	1	2	4	1	2	1	2				
4 4 3	240.9	100							1	1	5	10	59	63	33	15	2	1	
4 4 4	533.9	89										7	30	40	9	1			
4 4 5	1236.2	89									1	3	25	43	8	1	1		
4 4 6	35.3	0																	
4 5 2	0.9	0																	
4 5 3	67.0	4								1	2	1							
4 5 4	137.0	17							1			4	8	1	1				
4 5 5	1000.0	100								1	5	6	33	44	5	0	3		
4 5 6	15.4	0																	
4 6 3	32.0	4										4							
4 6 4	81.9	32							1	1		3	13	5	5	1			
4 6 5	2094.3	71									6	24	20	4	5				
4 6 6	10.7	0																	



TABLE A-1 continued  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
TRAVIS AND FURBER DATA  
LOGISTICS, MEDIAN RANGE METHOD  
DATA SAMPLE

U-10-A	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
BLOCK	MILES	PEAKS	-25	-20	-15	-10-17.5	-10	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35			
4 7 3	30.0	0																				
4 7 4	103.4	03																				
4 7 5	4023.1	330																				
4 7 6	2020.2	97																				
4 8 2	0.2	0																				
4 8 3	21.3	0																				
4 8 4	4072.0	443																				
4 8 5	10010.5	149																				
4 8 6	15.3	0																				
4 9 4	30219.5	647																				
4 9 5	43041.1	240																				
4 10 3	40.7	1																				
4 10 4	110760.1	1967																				
4 10 5	2242.9	21																				
5 1 1	0.4	0																				
5 1 2	114.2	197																				
5 1 3	140.2	197																				
5 1 4	32.9	47																				
5 1 5	3.9	0																				
5 2 2	20.4	20																				
5 2 3	110.0	111																				
5 2 4	92.0	110																				
5 2 5	100.7	77																				
5 2 6	2.6	0																				
5 3 2	39.7	27																				
5 3 3	191.0	95																				
5 3 4	160.4	147																				
5 3 5	650.7	205																				
5 3 6	10.2	0																				
5 4 2	3.1	7																				
5 4 3	200.3	111																				
5 4 4	107.5	12																				
5 4 5	1034.3	260																				
5 4 6	20.5	0																				
5 5 4	41.4	12																				
5 5 5	1000.0	142																				
5 5 6	24.3	2																				
5 6 4	63.7	4																				
5 6 5	2010.9	90																				
5 6 6	11.7	0																				
5 7 4	82.3	67																				
5 7 5	4000.3	243																				
5 7 6	3.6	1																				
5 8 3	4.9	0																				
5 8 4	4072.0	131																				
5 8 5	10526.3	101																				
5 9 4	24049.1	499																				
5 9 5	24520.0	799																				
5 10 4	73200.2	709																				
5 10 5	1004.0	1																				
6 1 2	71.6	42																				
6 1 3	110.9	112																				
6 1 4	34.1	43																				
6 1 5	4.0	3																				
6 2 2	9.7	1																				
6 2 3	70.0	60																				
6 2 4	60.2	46																				
6 2 5	51.2	39																				
6 3 2	7.1	4																				
6 3 3	99.0	39																				
6 3 4	112.0	43																				
6 3 5	409.5	161																				
6 3 6	22.8	4																				
6 4 3	60.7	32																				
6 4 4	173.0	40																				
6 4 5	975.0	161																				
6 4 6	13.1	0																				
6 5 4	19.7	0																				
6 5 5	1143.0	71																				
6 5 6	24.0	0																				
6 6 4	23.4	0																				
6 6 5	1534.4	90																				
6 6 6	13.9	0																				
6 7 4	40.1	0																				
6 7 5	2000.3	77																				
6 7 6	7.4	0																				
6 8 4	390.1	1																				
6 8 5	3079.7	62																				
6 9 4	1500.0	0																				
6 9 5	7230.9	19																				
6 10 4	9515.9	11																				
6 10 5	200.3	7																				
TOTAL	921500.5	19277	1	1	2	11	12	34	141	425	1300	4263	6144	1054	670	240	80	34	17	3	1	0



TABLE A-1  
DISTRIBUTION OF OBSERVED VERTICAL GUST VELOCITY  
FOR THE  
BRANIS AIR FORCE BASE  
LOGISTICS, LONG RANGE MISSION  
DATA SAMPLE

WIND- SPEED	NAUTICAL MILES	TOTAL PLANS	-25	-20	-15	-10	-7.5	-5	-2.5	0	2.5	5	7.5	10	12.5	15	17.5	20	25	30
2 1 2	4.7	7																		
2 2 2	3.5	0																		
2 2 3	1.4	0																		
2 3 2	9.0	2																		
2 3 3	2.9	3																		
2 4 2	1.1	0																		
2 4 3	10.1	2																		
2 4 4	3.0	0																		
2 5 4	3.3	0																		
2 5 5	0.5	0																		
2 6 5	9.0	0																		
2 7 4	2.0	0																		
2 7 5	3.1	0																		
3 1 2	107.5	70																		
3 1 3	10.4	2																		
3 2 2	199.0	95																		
3 2 3	155.2	51																		
3 2 4	97.0	21																		
3 3 2	107.7	30																		
3 3 3	214.4	101																		
3 3 4	202.9	67																		
3 3 5	75.6	35																		
3 3 6	3.2	0																		
3 4 2	4.0	0																		
3 4 3	70.4	1																		
3 4 4	223.2	19																		
3 4 5	311.9	7																		
3 4 6	4.4	0																		
3 5 3	34.0	0																		
3 5 4	100.4	0																		
3 5 5	409.1	3																		
3 5 6	17.2	0																		
3 6 4	44.1	0																		
3 6 5	400.0	1																		
3 6 6	3.2	0																		
3 7 4	100.2	0																		
3 7 5	016.9	7																		
3 8 4	004.4	0																		
3 8 5	516.0	1																		
3 9 3	2.2	0																		
3 9 4	2000.0	44																		
3 9 5	2143.0	24																		
3 10 3	221.7	0																		
3 10 4	19300.2	140																		
3 10 5	212.0	3																		
4 0 4	1005.2	60																		
4 0 5	00.0	0																		
4 0 6	0252.0	01																		
4 0 7	3912.1	40																		
4 10 3	107.0	0																		
4 10 4	40430.3	400																		
4 10 5	013.0	0																		
5 3 3	2.0	0																		
5 4 3	15.9	0																		
5 5 3	17.0	0																		
5 6 3	27.9	15																		
5 7 3	171.3	0																		
5 8 4	1720.1	33																		
5 8 5	500.0	1																		
5 9 4	14420.0	172																		
5 9 5	11207.2	10																		
5 10 4	34407.3	011																		
5 10 5	1903.0	10																		
6 1 2	35.7	31																		
6 1 3	01.5	50																		
6 1 4	77.0	21																		
6 2 2	3.7	0																		
6 2 3	20.9	27																		
6 2 4	27.0	30																		
6 2 5	40.6	94																		
6 3 3	29.0	18																		
6 3 4	40.3	21																		
6 4 3	309.7	92																		
6 4 4	20.9	11																		
6 4 5	13.9	14																		
6 4 6	24.0	17																		
6 4 7	479.6	170																		
6 4 8	35.1	2																		
6 5 4	4.0	0																		
6 5 5	027.0	99																		
6 6 3	003.0	45																		
6 6 4	7.2	0																		
6 7 3	1347.0	39																		
6 7 4	30.4	0																		
6 8 4	902.1	21																		
6 8 5	1711.3	27																		
6 9 4	2100.5	60																		
6 9 5	0439.0	370																		
6 10 4	3000.0	30																		
6 10 5	205.9	4																		
TOTAL	179221.3	1417	0	0	0	1	5	3	10	20	270	1001	1550	434	129	20	10	5	0	0



TABLE 204  
DISTRIBUTION OF SURFACE VERTICAL CURRENT VELOCITY  
FOR THE  
FRAMES AND PILES CASE  
BASED ON  
DATA SAMPLE

STATION	DEPTH, FT.	TOTAL	-20	-10	-05	-02-17.0	-10	-12.0	-20	-7.0	-5	0	07.0	10	12.0	10-17.0	20	25	10-20
100-0	100.0	1191				2	1	0	20	60	100	200	200	210	70	20	11	9	1
100-1	100.1	100							0	0	0	10	10	10	10	0	0	0	
100-2	100.2	100							0	0	0	10	10	10	10	0	0	0	
100-3	100.3	100							0	0	0	10	10	10	10	0	0	0	
100-4	100.4	100							0	0	0	10	10	10	10	0	0	0	
100-5	100.5	100							0	0	0	10	10	10	10	0	0	0	
100-6	100.6	100							0	0	0	10	10	10	10	0	0	0	
100-7	100.7	100							0	0	0	10	10	10	10	0	0	0	
100-8	100.8	100							0	0	0	10	10	10	10	0	0	0	
100-9	100.9	100							0	0	0	10	10	10	10	0	0	0	
100-10	100.10	100							0	0	0	10	10	10	10	0	0	0	
100-11	100.11	100							0	0	0	10	10	10	10	0	0	0	
100-12	100.12	100							0	0	0	10	10	10	10	0	0	0	
100-13	100.13	100							0	0	0	10	10	10	10	0	0	0	
100-14	100.14	100							0	0	0	10	10	10	10	0	0	0	
100-15	100.15	100							0	0	0	10	10	10	10	0	0	0	
100-16	100.16	100							0	0	0	10	10	10	10	0	0	0	
100-17	100.17	100							0	0	0	10	10	10	10	0	0	0	
100-18	100.18	100							0	0	0	10	10	10	10	0	0	0	
100-19	100.19	100							0	0	0	10	10	10	10	0	0	0	
100-20	100.20	100							0	0	0	10	10	10	10	0	0	0	
100-21	100.21	100							0	0	0	10	10	10	10	0	0	0	
100-22	100.22	100							0	0	0	10	10	10	10	0	0	0	
100-23	100.23	100							0	0	0	10	10	10	10	0	0	0	
100-24	100.24	100							0	0	0	10	10	10	10	0	0	0	
100-25	100.25	100							0	0	0	10	10	10	10	0	0	0	
100-26	100.26	100							0	0	0	10	10	10	10	0	0	0	
100-27	100.27	100							0	0	0	10	10	10	10	0	0	0	
100-28	100.28	100							0	0	0	10	10	10	10	0	0	0	
100-29	100.29	100							0	0	0	10	10	10	10	0	0	0	
100-30	100.30	100							0	0	0	10	10	10	10	0	0	0	
100-31	100.31	100							0	0	0	10	10	10	10	0	0	0	
100-32	100.32	100							0	0	0	10	10	10	10	0	0	0	
100-33	100.33	100							0	0	0	10	10	10	10	0	0	0	
100-34	100.34	100							0	0	0	10	10	10	10	0	0	0	
100-35	100.35	100							0	0	0	10	10	10	10	0	0	0	
100-36	100.36	100							0	0	0	10	10	10	10	0	0	0	
100-37	100.37	100							0	0	0	10	10	10	10	0	0	0	
100-38	100.38	100							0	0	0	10	10	10	10	0	0	0	
100-39	100.39	100							0	0	0	10	10	10	10	0	0	0	
100-40	100.40	100							0	0	0	10	10	10	10	0	0	0	
100-41	100.41	100							0	0	0	10	10	10	10	0	0	0	
100-42	100.42	100							0	0	0	10	10	10	10	0	0	0	
100-43	100.43	100							0	0	0	10	10	10	10	0	0	0	
100-44	100.44	100							0	0	0	10	10	10	10	0	0	0	
100-45	100.45	100							0	0	0	10	10	10	10	0	0	0	
100-46	100.46	100							0	0	0	10	10	10	10	0	0	0	
100-47	100.47	100							0	0	0	10	10	10	10	0	0	0	
100-48	100.48	100							0	0	0	10	10	10	10	0	0	0	
100-49	100.49	100							0	0	0	10	10	10	10	0	0	0	
100-50	100.50	100							0	0	0	10	10	10	10	0	0	0	
100-51	100.51	100							0	0	0	10	10	10	10	0	0	0	
100-52	100.52	100							0	0	0	10	10	10	10	0	0	0	
100-53	100.53	100							0	0	0	10	10	10	10	0	0	0	
100-54	100.54	100							0	0	0	10	10	10	10	0	0	0	
100-55	100.55	100							0	0	0	10	10	10	10	0	0	0	
100-56	100.56	100							0	0	0	10	10	10	10	0	0	0	
100-57	100.57	100							0	0	0	10	10	10	10	0	0	0	
100-58	100.58	100							0	0	0	10	10	10	10	0	0	0	
100-59	100.59	100							0	0	0	10	10	10	10	0	0	0	
100-60	100.60	100							0	0	0	10	10	10	10	0	0	0	
100-61	100.61	100							0	0	0	10	10	10	10	0	0	0	
100-62	100.62	100							0	0	0	10	10	10	10	0	0	0	
100-63	100.63	100							0	0	0	10	10	10	10	0	0	0	
100-64	100.64	100							0	0	0	10	10	10	10	0	0	0	
100-65	100.65	100							0	0	0	10	10	10	10	0	0	0	
100-66	100.66	100							0	0	0	10	10	10	10	0	0	0	
100-67	100.67	100							0	0	0	10	10	10	10	0	0	0	
100-68	100.68	100							0	0	0	10	10	10	10	0	0	0	
100-69	100.69	100							0	0	0	10	10	10	10	0	0	0	
100-70	100.70	100							0	0	0	10	10	10	10	0	0	0	
100-71	100.71	100							0	0	0	10	10	10	10	0	0	0	
100-72	100.72	100							0	0	0	10	10	10	10	0	0	0	
100-73	100.73	100							0	0	0	10	10	10	10	0	0	0	
100-74	100.74	100							0	0	0	10	10	10	10	0	0	0	
100-75	100.75	100							0	0	0	10	10	10	10	0	0	0	
100-76	100.76	100							0	0	0	10	10	10	10	0	0	0	
100-77	100.77	100							0	0	0	10	10	10	10	0	0	0	
100-78	100.78	100							0	0	0	10	10	10	10	0	0	0	
100-79	100.79	100							0	0	0	10	10	10	10	0	0	0	
100-80	100.80	100							0	0	0	10	10	10	10	0	0	0	
100-81	100.81	100							0	0	0	10	10	10	10	0	0	0	
100-82	100.82	100							0	0	0	10	10	10	10	0	0	0	
100-83	100.83	100							0	0	0	10	10	10	10	0	0	0	
100-84	100.84	100							0	0	0	10	10	10	10	0	0	0	
100-85	100.85	100							0	0	0	10	10	10	10	0	0	0	
100-86	100.86	100							0	0	0	10	10	10	10	0	0	0	
100-87	100.87	100							0	0	0	10	10	10	10	0	0	0	
100-88	100.88	100							0	0	0	10	10	10	10	0	0	0	
100-89	100.89	100							0	0	0	10	10	10	10	0	0	0	
100-90	100.90	100							0	0	0	10	10	10	10	0	0	0	
100-91	100.91	100							0	0	0	10	10	10	10	0	0	0	
100-92	100.92	100							0	0	0	10	10	10	10	0	0	0	
100-93	100.93	100							0	0	0	10	10	10	10	0	0	0	
100-94	100.94	100							0	0	0	10	10	10	10	0	0	0	
100-95	100.95	100																	



**TABLE 44 continued**

**DISTRIBUTION OF UNITED STATES AND FOREIGN BIRTHS**

[illegible]

**TABLE 410**  
**DISTRIBUTION OF SERVICE VERTICAL-SHIP VELOCITY**

[illegible]



**RENDERED PAGE BLANK - NOT VIDEO**

**APPENDIX B**

**LEAD-THE-FORCE FLIGHT LOADS DATA**



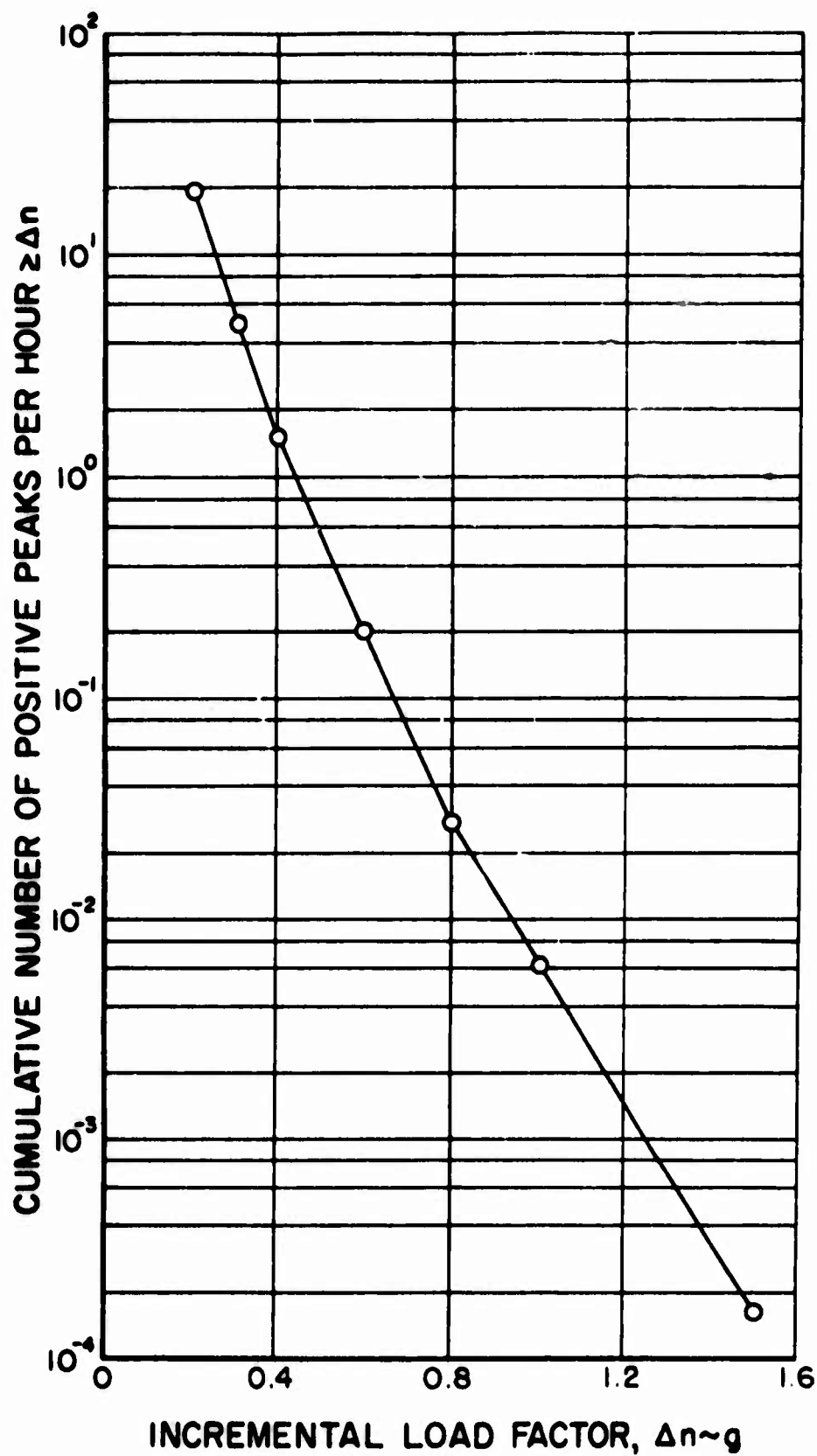


Figure B1. Positive Maneuver Spectrum Obtained from 6,076 Flight-Hours of Lead-the-Force Flight Loads Data



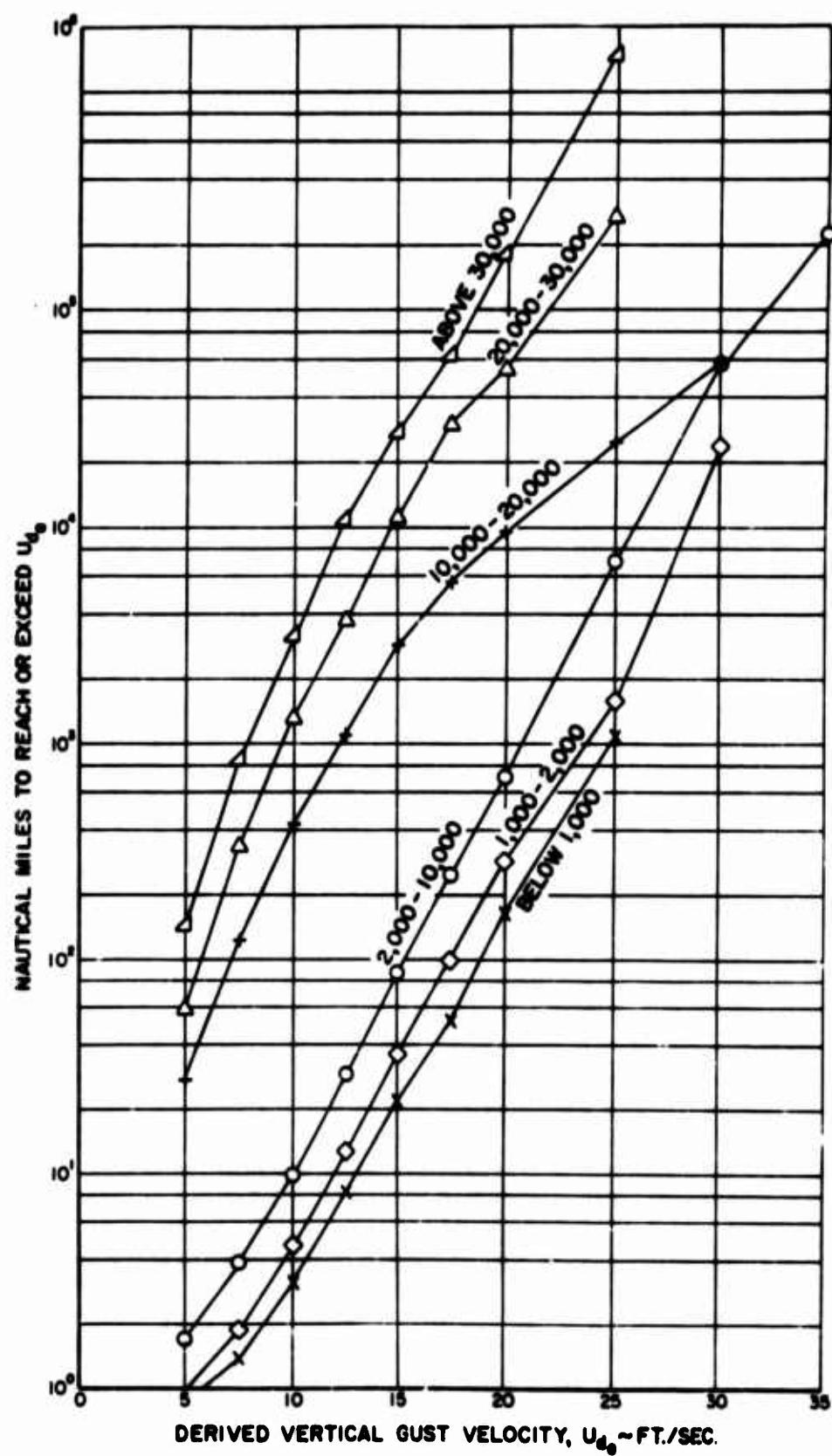


Figure B2. Positive Gust Spectrum by Altitude from 6,076 Flight-Hours of Lead-the-Force Flight Loads Data



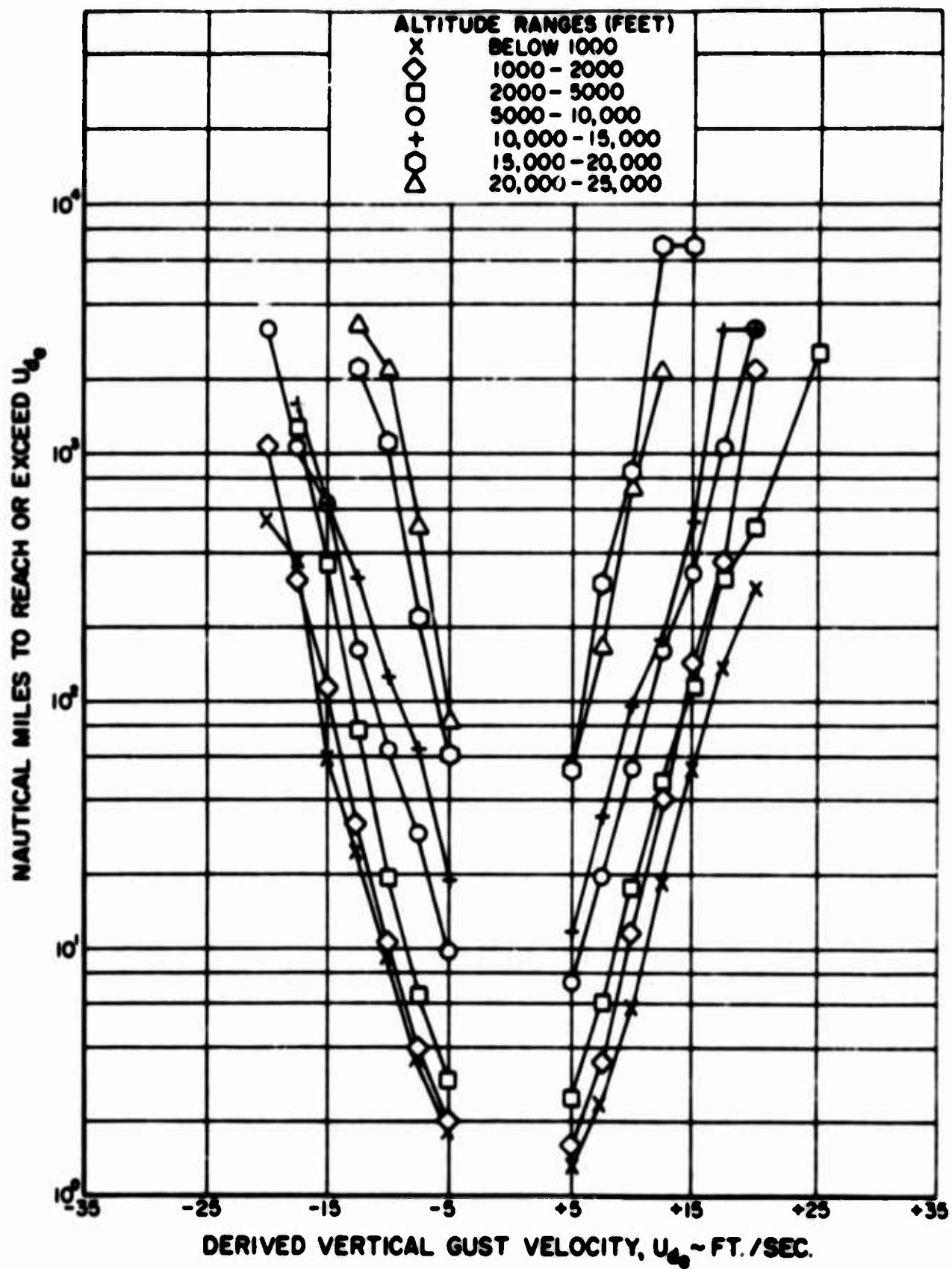


Figure B3. Gust Spectrum by Altitude Obtained from 646 Flight-Hours of LTF Data Acquired at Charleston Air Force Base (Refer to Table B1)



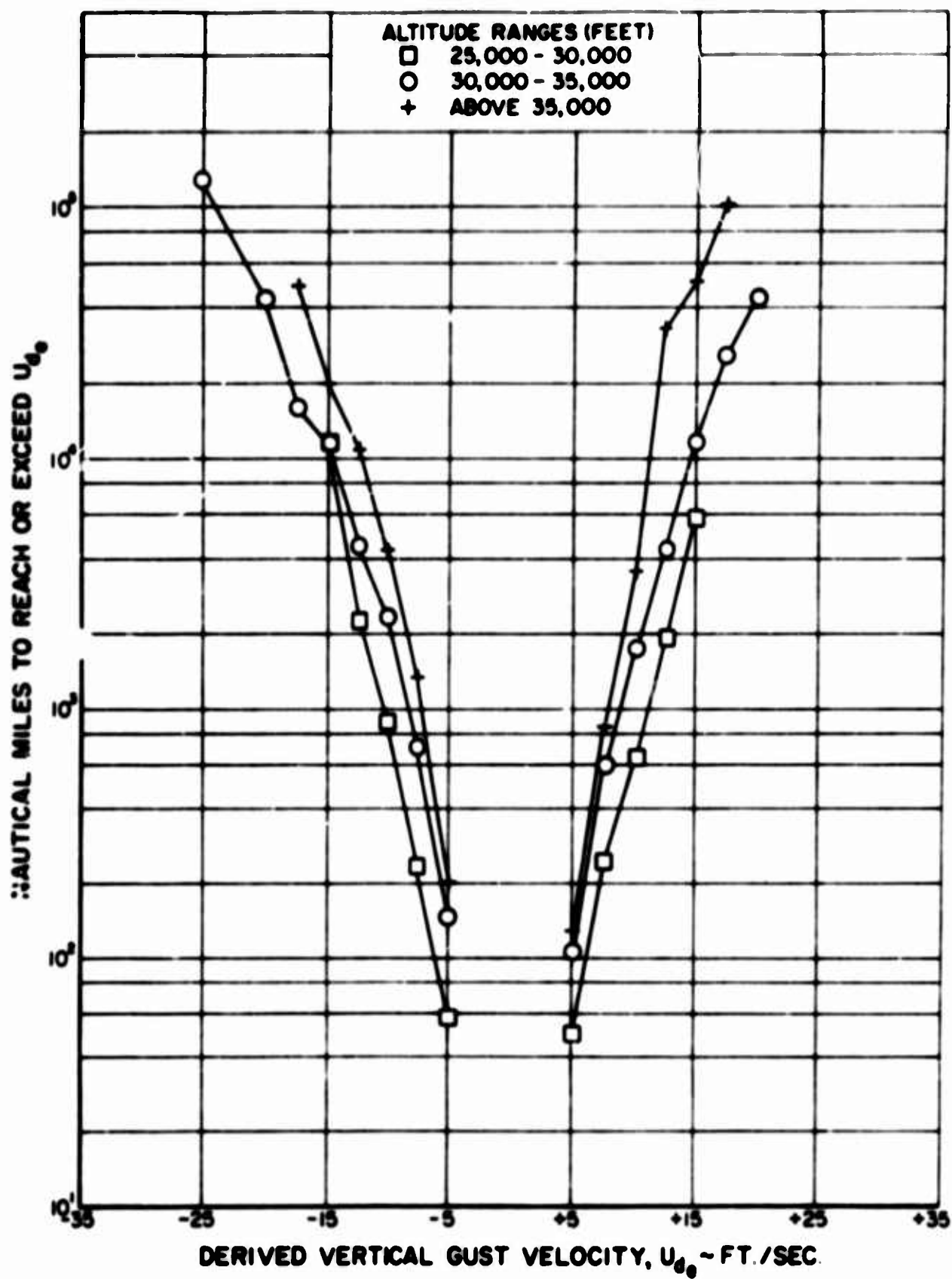


Figure B3 --- concluded



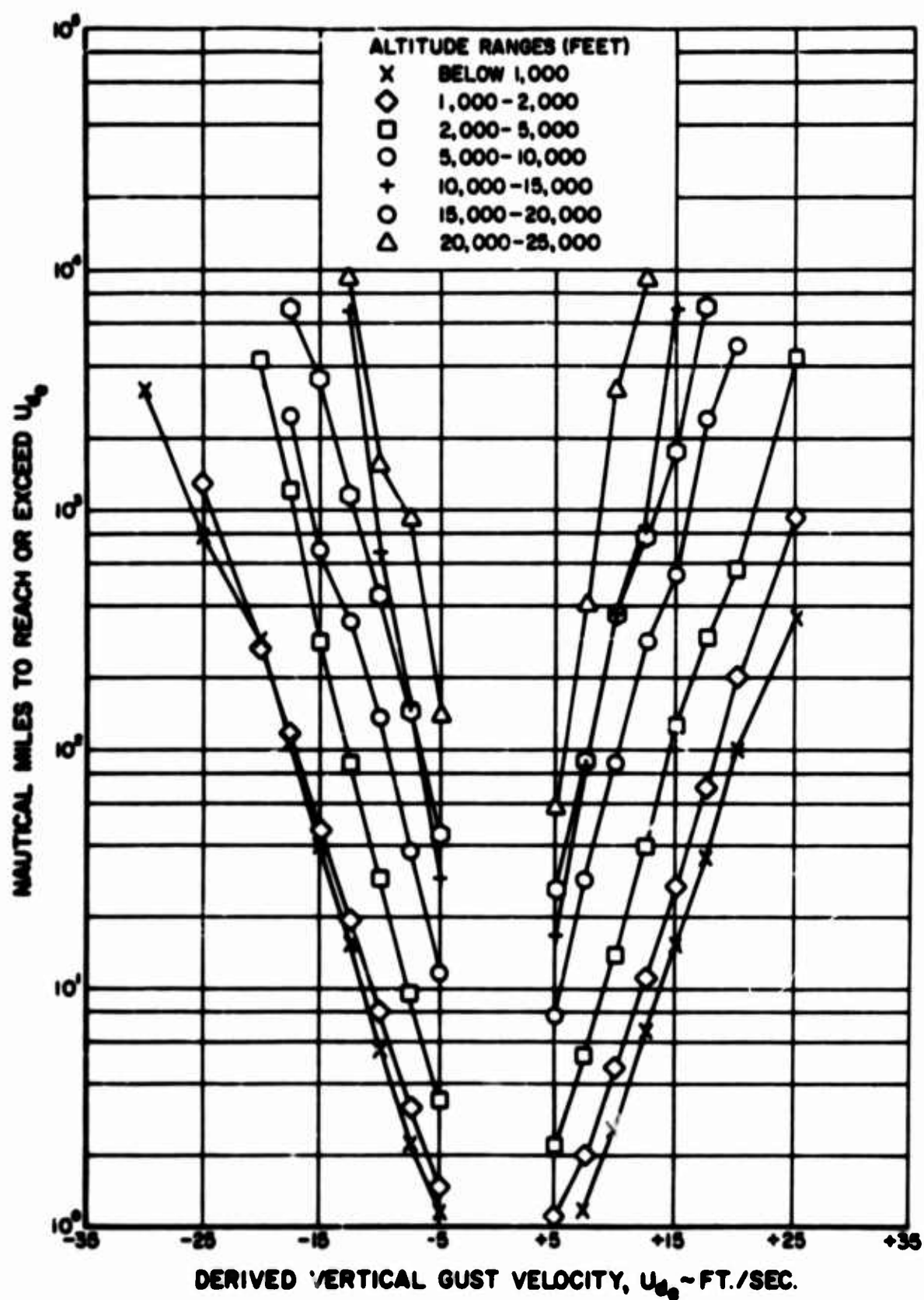


Fig. re B4. Gust Spectrum by Altitude Obtained from 960 Flight-Hours of LTF Data Acquired at Dover Air Force Base (Refer to Table B2)



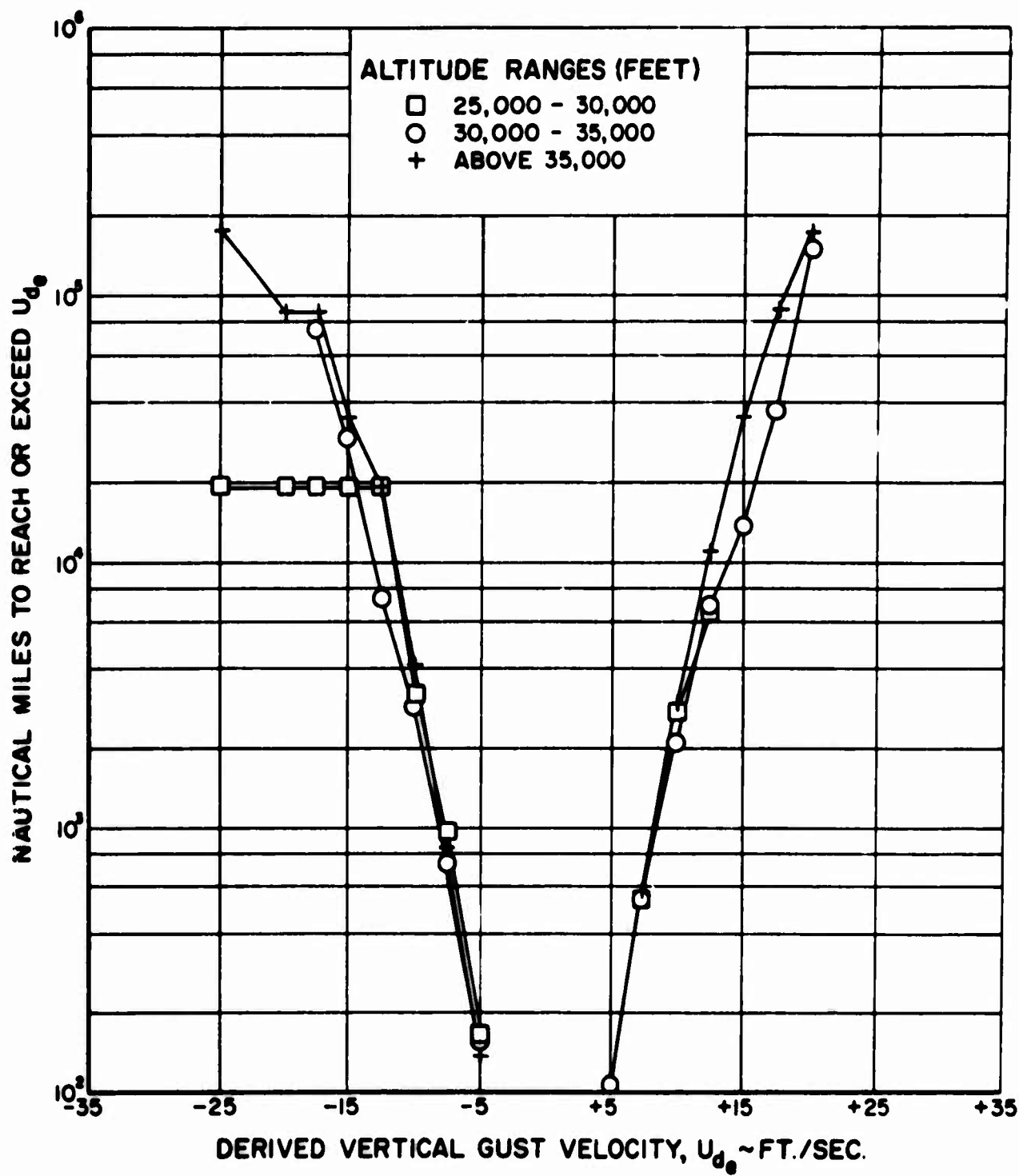
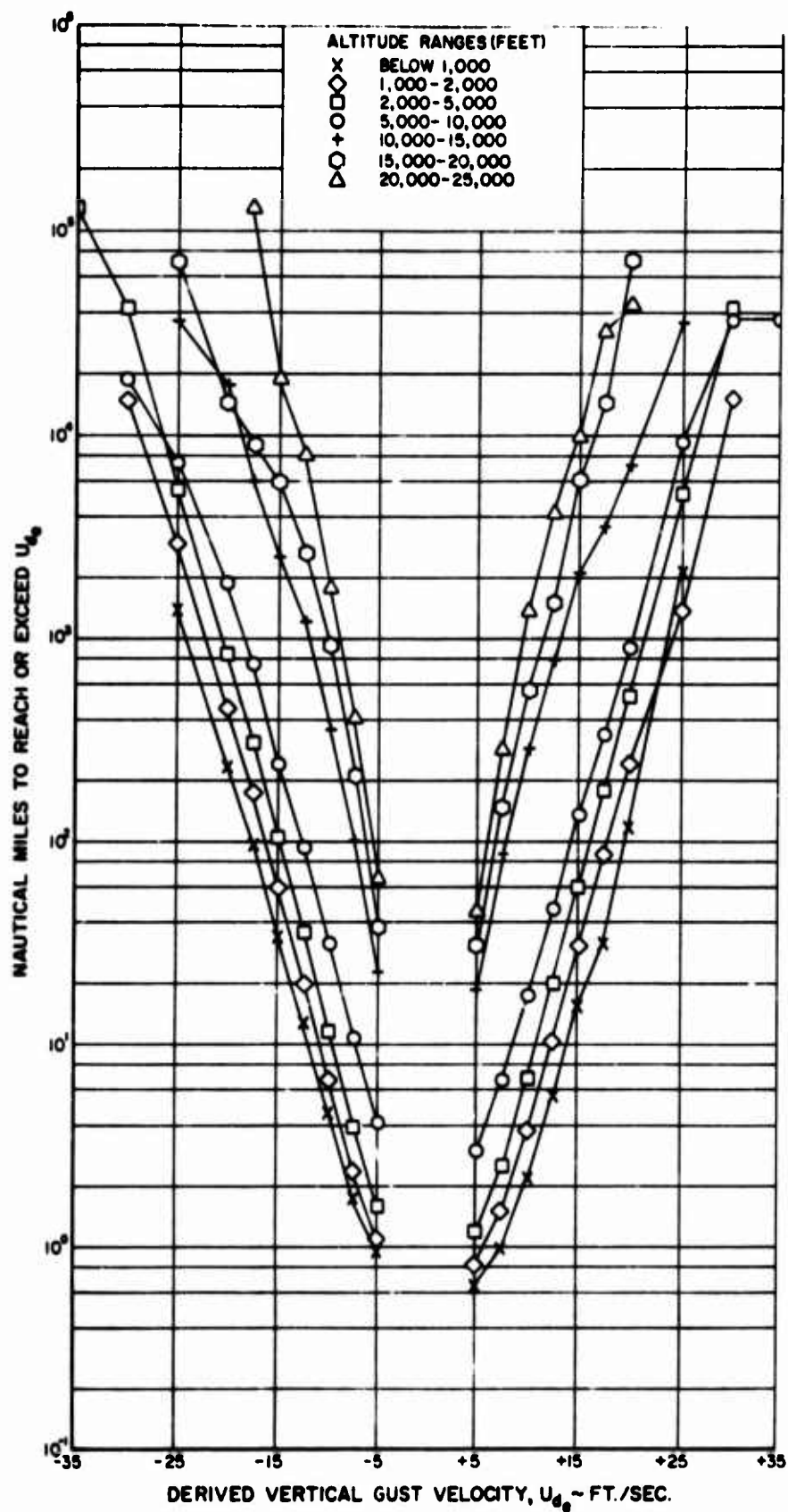


Figure B4 --- concluded





**Figure B5. Gust Spectrum by Altitude Obtained from 1,949 Flight-Hours of LTF Data Acquired at Tinker Air Force Base (Refer to Table B3)**



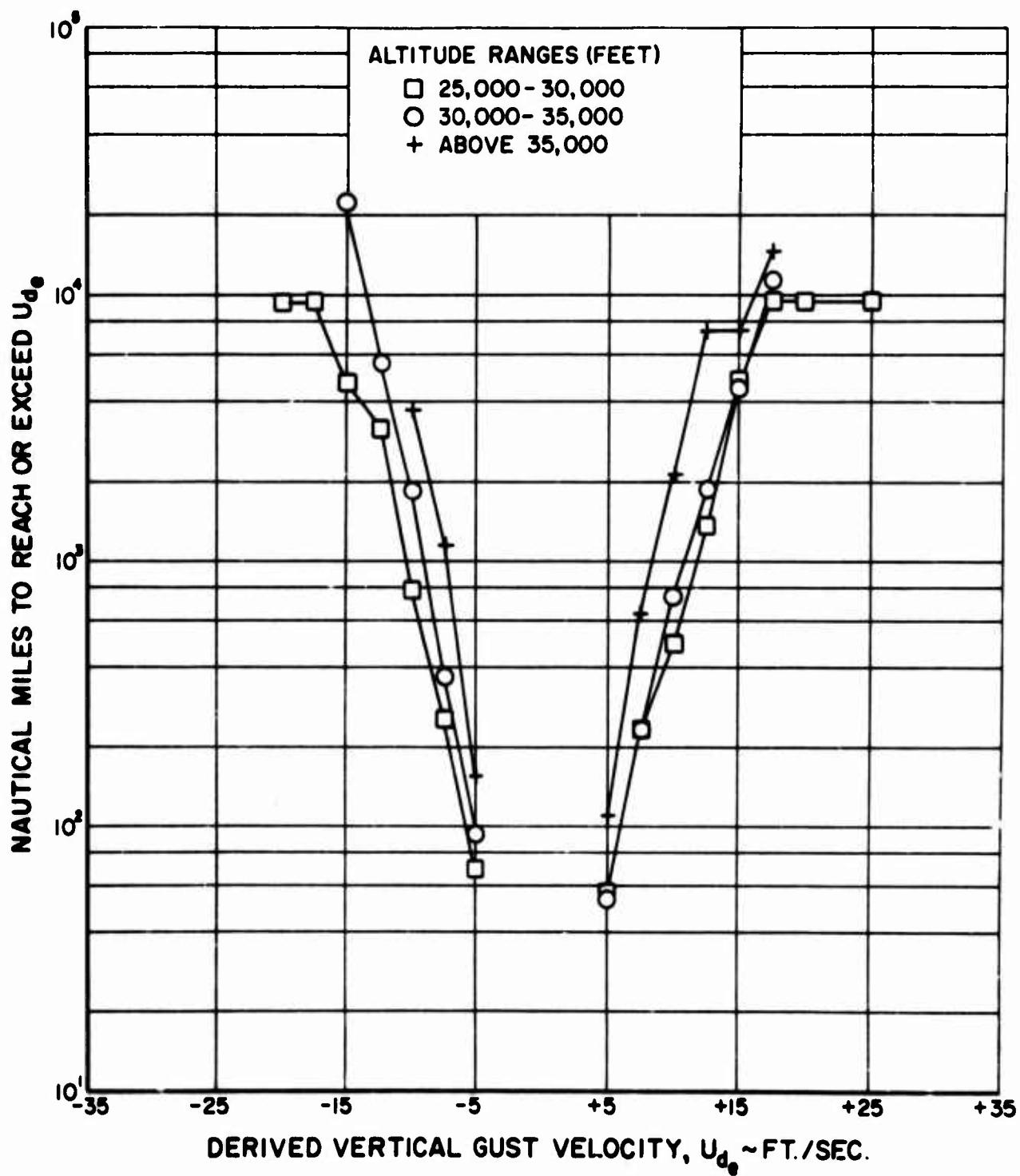


Figure B5 --- concluded



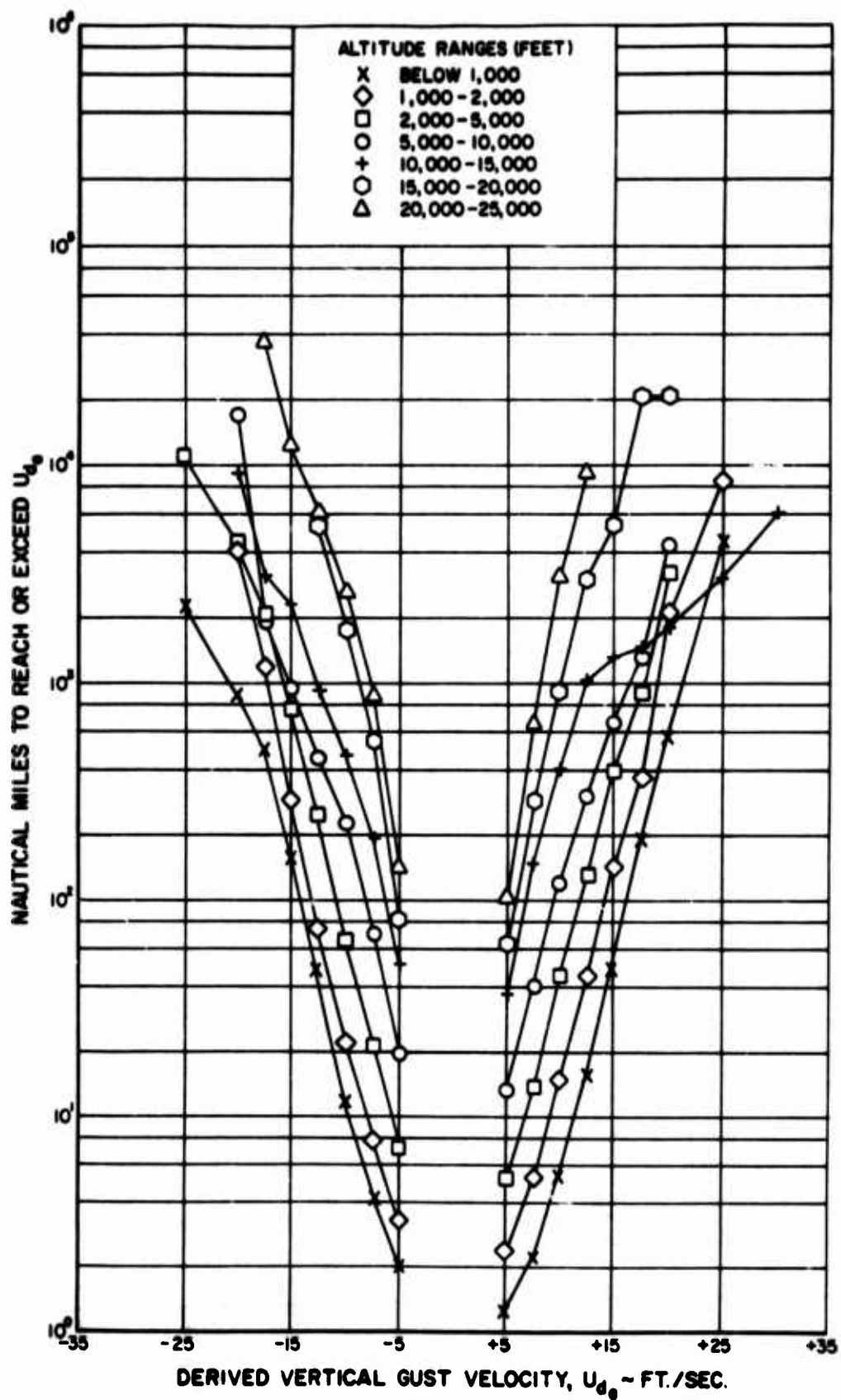


Figure B6. Gust Spectrum by Altitude Obtained from 2,521 Flight-Hours of LTF Data Acquired at Travis Air Force Base (Refer to Table B4)



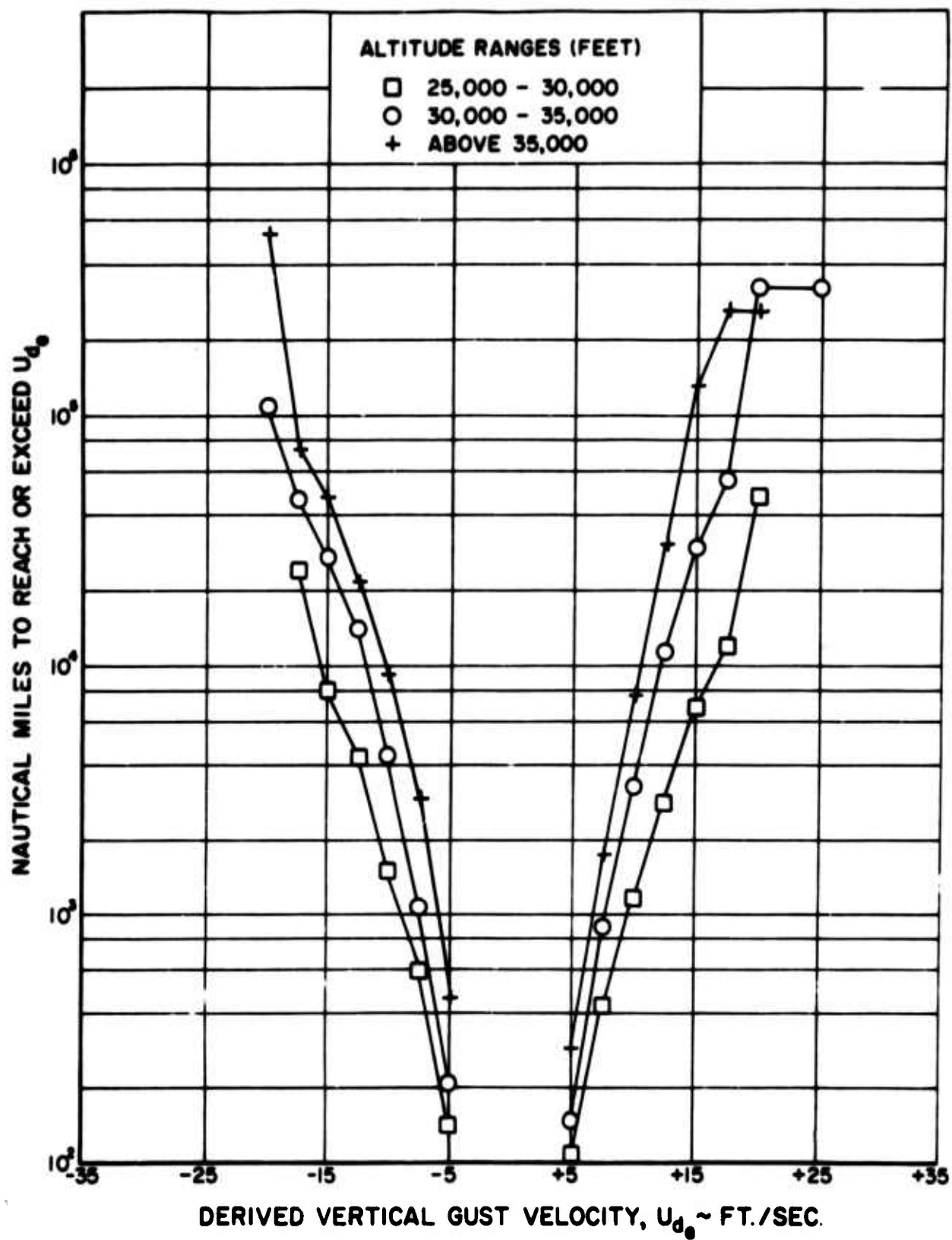


Figure B6 --- concluded



TABLE BI  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
BY ALTITUDE  
FOR THE  
CHARLESTON AIR FORCE BASE  
DATA SAMPLE

ALTITUDE (1000 FT)	DISTANCE IN MILES)	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																		
			-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35		
PELCH 1	1106.3	1442				2	1	10	27	77	105	292	360	290	136	30	13	4	0		
1 TO 2	2147.7	2443				2	5	12	48	137	330	934	730	439	135	30	9	9	1		
2 TO 5	2909.2	1073				2	5	26	96	260	649	600	270	92	31	14	3	4	1		
5 TO 10	3107.2	777				1	2	2	15	30	60	227	270	102	40	10	7	2	1		
10 TO 15	5134.3	437				2	3	5	15	24	121	174	60	15	12	5			1		
15 TO 20	6741.3	237							3	3	25	70	105	14	7		1				
20 TO 25	6529.0	190							2	1	10	66	76	31	6	3					
25 TO 30	11400.0	441							1	4	0	36	191	194	29	12	4	2			
30 TO 35	170327.4	2107				1	2	5	3	17	27	127	694	1012	144	45	10	6	2	3	
ABOVE 35	97370.9	1256							2	3	4	14	91	419	691	80	25	1	1	1	
TOTAL	262407.1	11200				1	7	19	45	191	400	1117	3040	4197	1457	311	157	50	17	14	1

TABLE BI  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
BY ALTITUDE  
FOR THE  
DOVER AIR FORCE BASE  
DATA SAMPLE

ALTITUDE (1000 FT)	DISTANCE (IN MILES)	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
			-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35			
PELCH 1	3147.5	7057		1	3	7	10	50	125	343	872	1356	1509	1437	765	262	117	60	25	9		
1 TO 2	6454.0	10267				5	19	31	85	196	476	1247	2330	2649	1022	013	346	147	61	25	7	
2 TO 5	8392.7	6403					2	5	23	67	196	506	1052	2222	1047	309	149	36	14	10	2	
5 TO 10	4020.0	1049						2	5	7	22	90	296	459	113	30	0	7	1	1		
10 TO 15	6606.0	633								1	9	34	100	331	60	10	7	1				
15 TO 20	6932.2	436						1	1	4	10	33	100	192	50	10	5	3	1			
20 TO 25	9340.1	231								1	5	4	57	141	20	2	1					
25 TO 30	19021.0	310									5	14	90	156	20	4	3					
30 TO 35	146060.4	2707								2	3	15	32	140	743	1100	209	90	11	7	3	1
ABOVE 35	173179.9	3054						1	1		3	4	35	161	1044	1507	230	44	11	3	1	1
TOTAL	304671.4	31027				1	10	29	99	170	420	1153	3109	7070	10414	9032	2125	603	321	141	60	10



TABLE B3  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
BY ALTITUDE  
FOR THE  
TINIAN AIR FORCE BASE  
DATA SAMPLE

ALTITUDE 1000 FT)	DISTANCE IN MILES)	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																				
			-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15+17.5	+20	+25	+30+35				
0000 1	4167.7	11095				3	15	26	80	204	577	1512	2079	2404	2287	1140	493	146	93	34	2		
1 FL 2	29357.0	43140				2	8	55	187	324	544	2042	8032	14104	16670	11761	5050	1917	626	220	104	20	2
2 FL 4	175333.7	106914	1	2	20	129	242	790	2367	7347	21456	47036	56723	51473	12371	42301	1410	462	217	22	3		
4 FL 10	34970.1	21247				2	3	15	29	104	241	755	2272	5515	6848	3405	1320	504	145	70	37	3	1
10 FL 15	35184.9	3454				1	1	4	8	15	69	257	1195	1535	289	79	29	7	5	4	1		
15 FL 20	71603.4	4297				1	4	3	4	15	52	276	1577	1801	350	83	37	7	4	1			
20 FL 25	127670.3	4895						1	4	9	57	244	1671	2416	360	62	18	9	1	3			
25 FL 30	7409.0	305						1		1	1	9	25	101	127	21	12	5	1				1
30 FL 35	22214.7	650								1	3	8	49	179	121	67	18	7	3	2			
0000 35	14679.7	229										4	9	82	110	16	5		1	1			
TOTAL	476261.2	295846	1	4	34	220	432	1310	3844	11820	14276	71717	100133	50039	20156	72402	375	850	400	49	5	1	

TABLE B4  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
BY ALTITUDE  
FOR THE  
FRANKS AIR FORCE BASE  
DATA SAMPLE

ALTITUDE (1000 FT)	DISTANCE (IN MILES)	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																									
			-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15+17.5	+20	+25	+30+35									
0000 1	4447.2	5764				2	3	4	19	64	281	707	1114	1546	1161	554	193	69	19	7	1							
1 FC 2	8401.5	6150						2	5	22	84	267	716	1462	1981	1035	387	130	56	19	3	1						
2 FC 5	22227.7	7491						2	3	6	19	61	249	770	2062	2745	1125	320	114	32	10	7						
4 FC 10	17130.0	2105								1	8	9	20	37	170	634	880	284	85	31	13	9	4					
10 FC 15	14194.5	871								2	4	2	12	20	54	271	300	80	20	4	1	3	4	3	3			
15 FC 20	20961.5	501										4	8	27	219	260	51	16	3	3		1						
20 FC 25	36496.6	614										1	2	3	8	28	215	301	44	8	4							
25 FC 30	47596.4	790										2	4	5	21	50	264	332	70	25	10	3	3	1				
30 FC 35	322259.4	3755										3	4	5	11	52	226	1259	1832	264	70	18	5	5	1			
0000 35	520782.9	2964										1	6	4	13	52	120	450	1543	220	51	13	2		2			
TOTAL	1619550.2	31179										4	15	60	86	279	977	2020	8469	11000	4343	1552	920	164	72	29	6	3



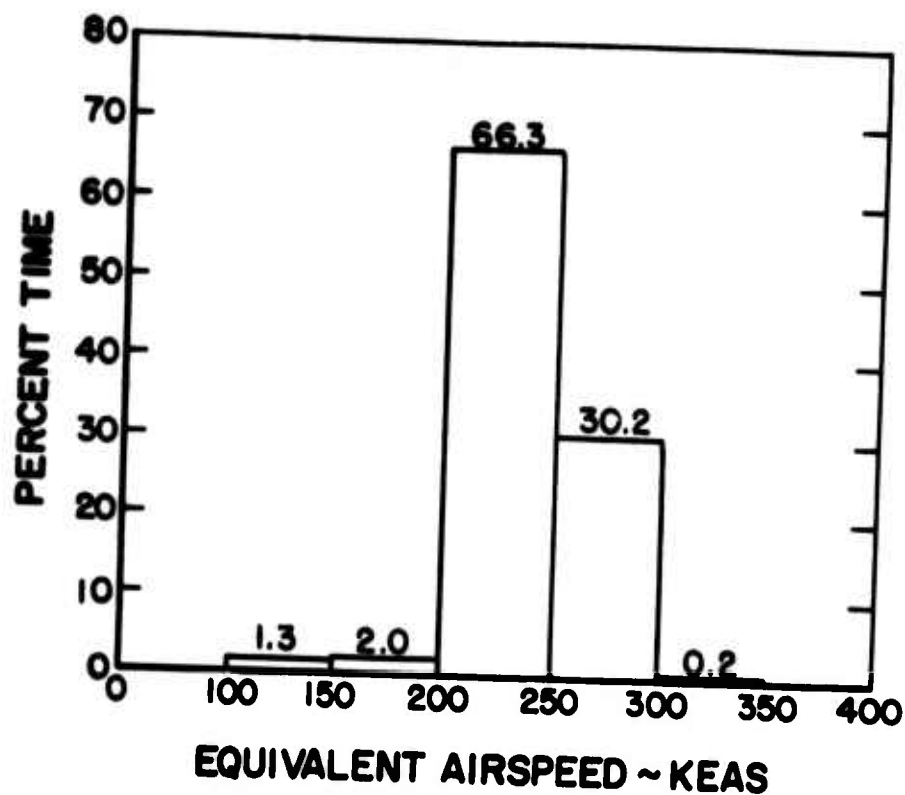


Figure B7 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Logistics Medium Range Missions

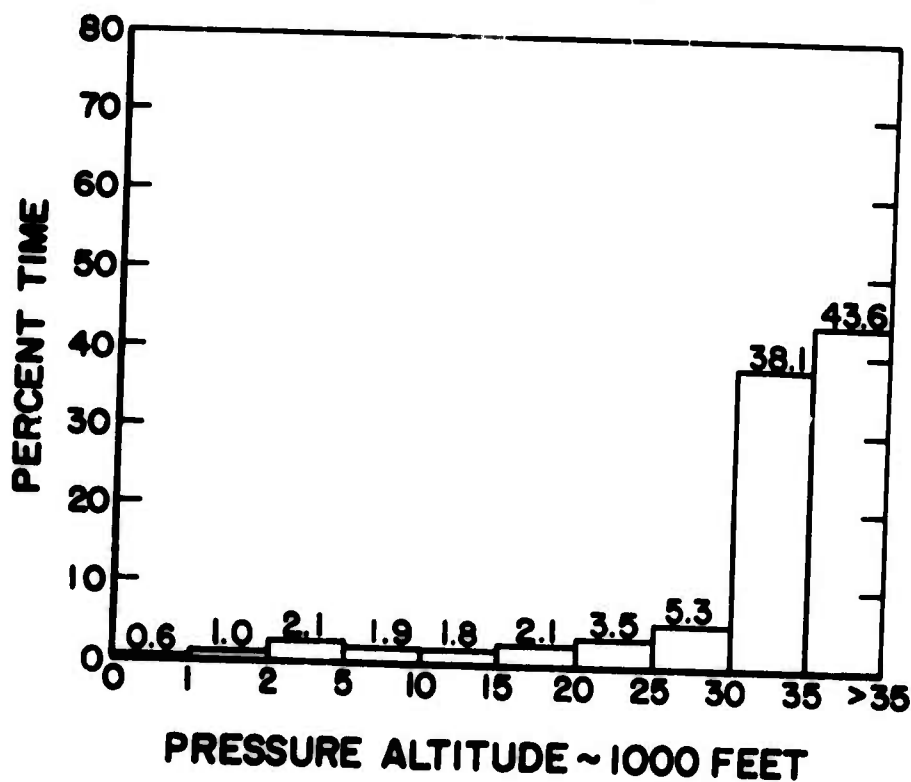


Figure B8 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Logistics Medium Range Missions



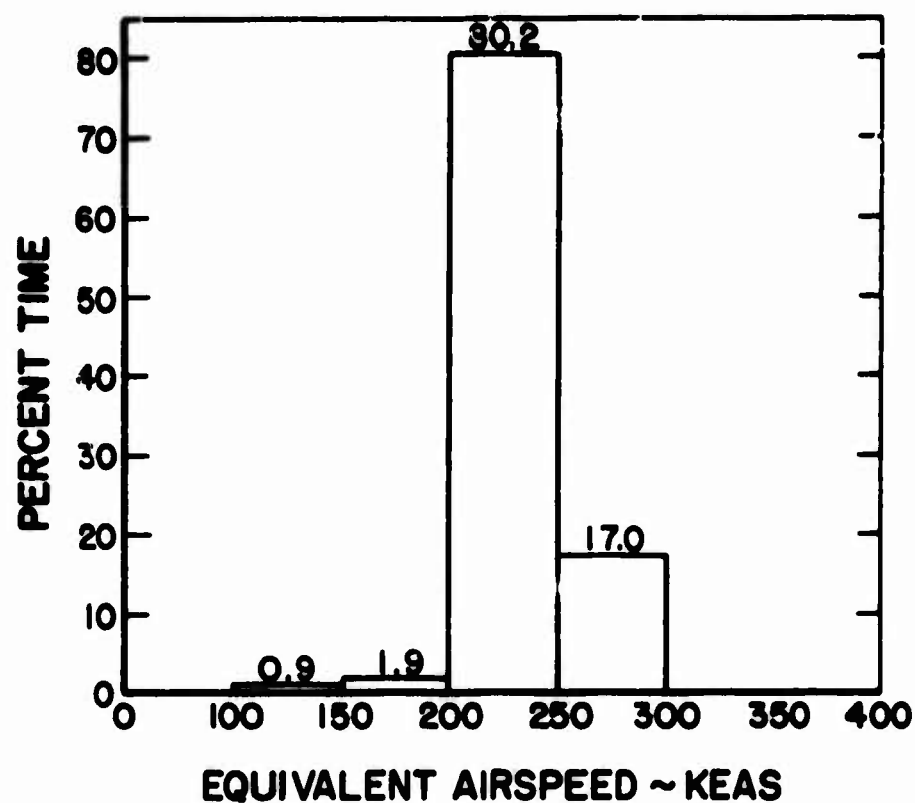


Figure B9 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Logistics Long Range Missions

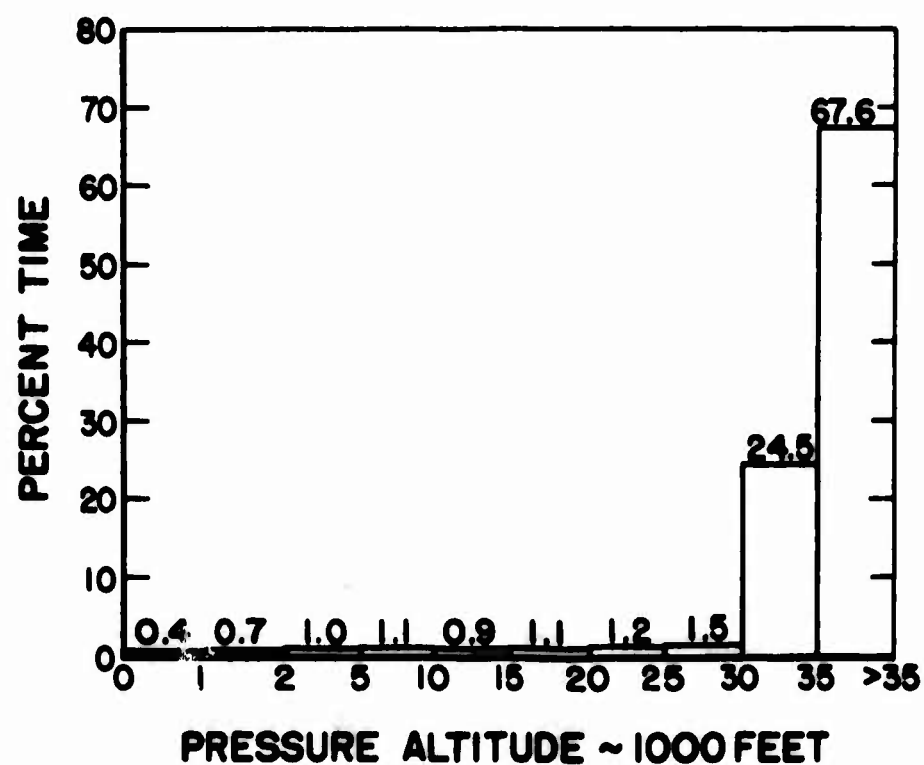


Figure B10 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Logistics Long Range Missions



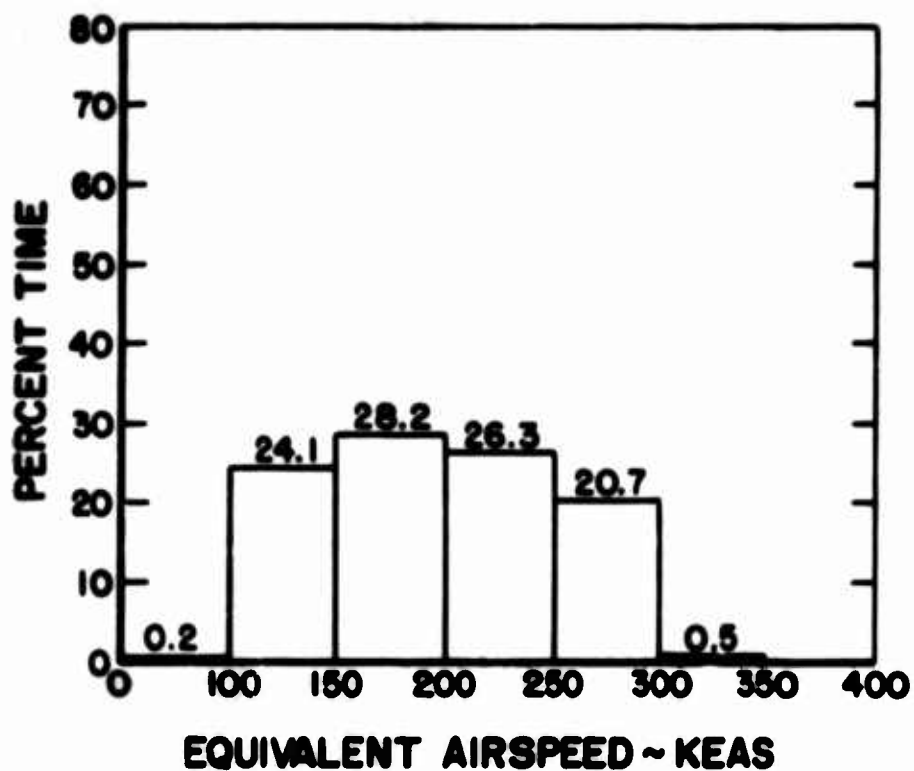


Figure B11 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Training Missions

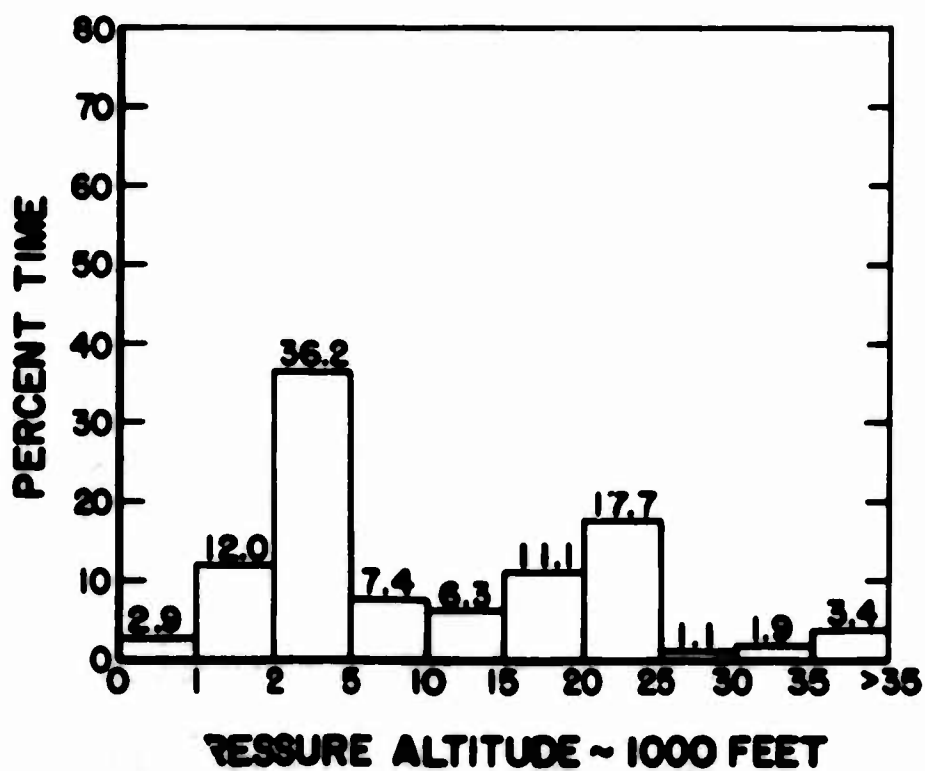


Figure B12 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Training Missions



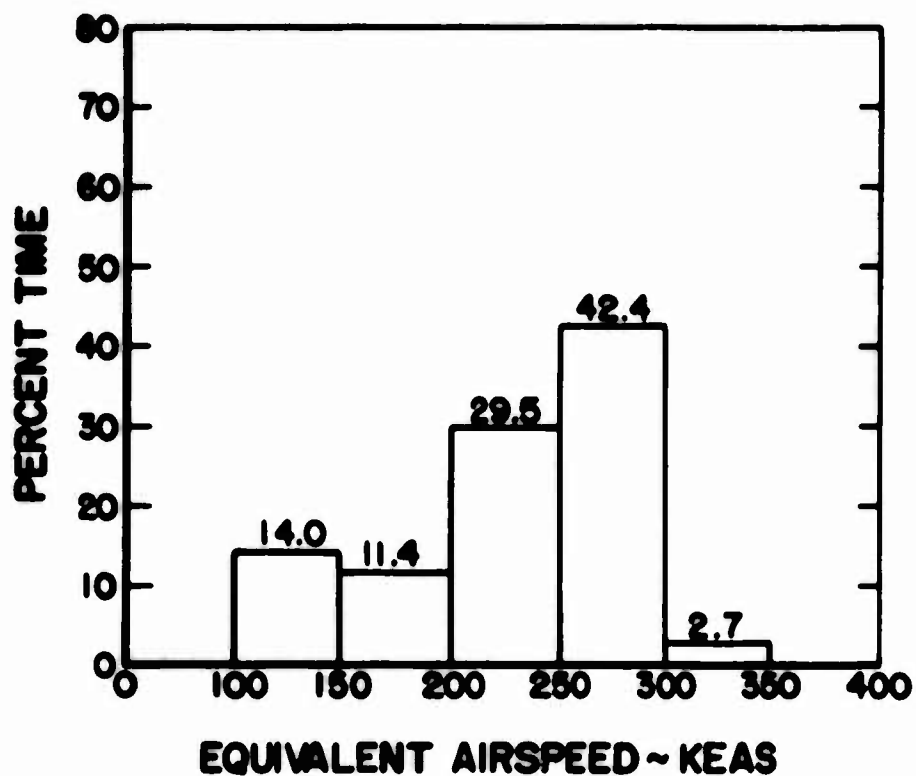


Figure B13 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Miscellaneous Missions

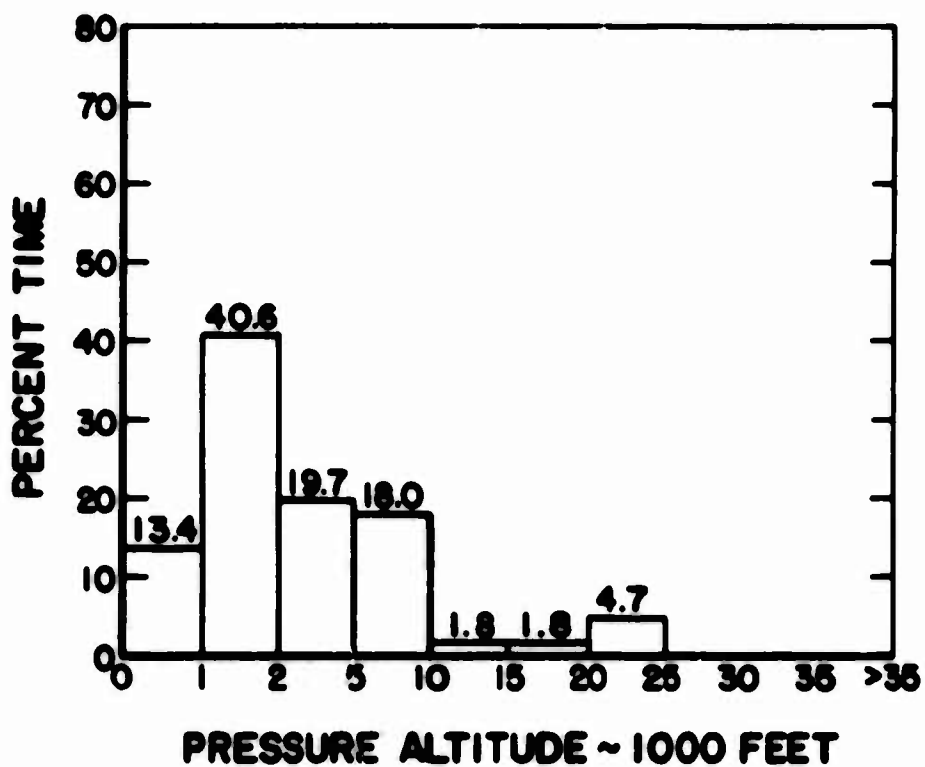


Figure B14 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Miscellaneous Missions



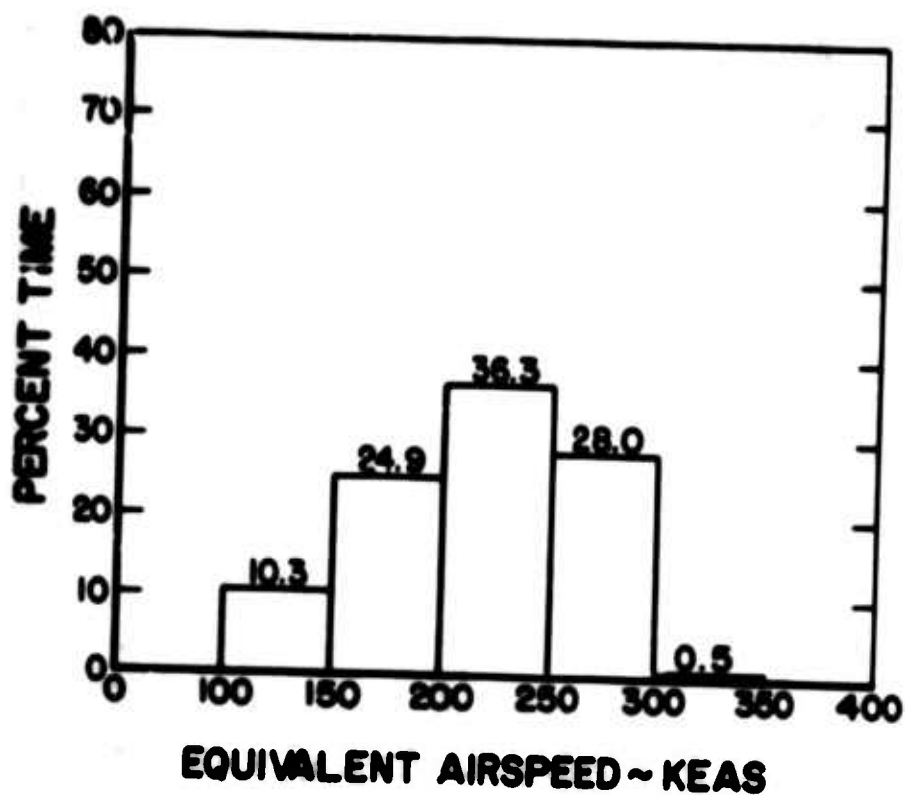


Figure B15 Percentages of the Total Flight Time Spent in the Various Airspeed Bands for Flight Test Missions

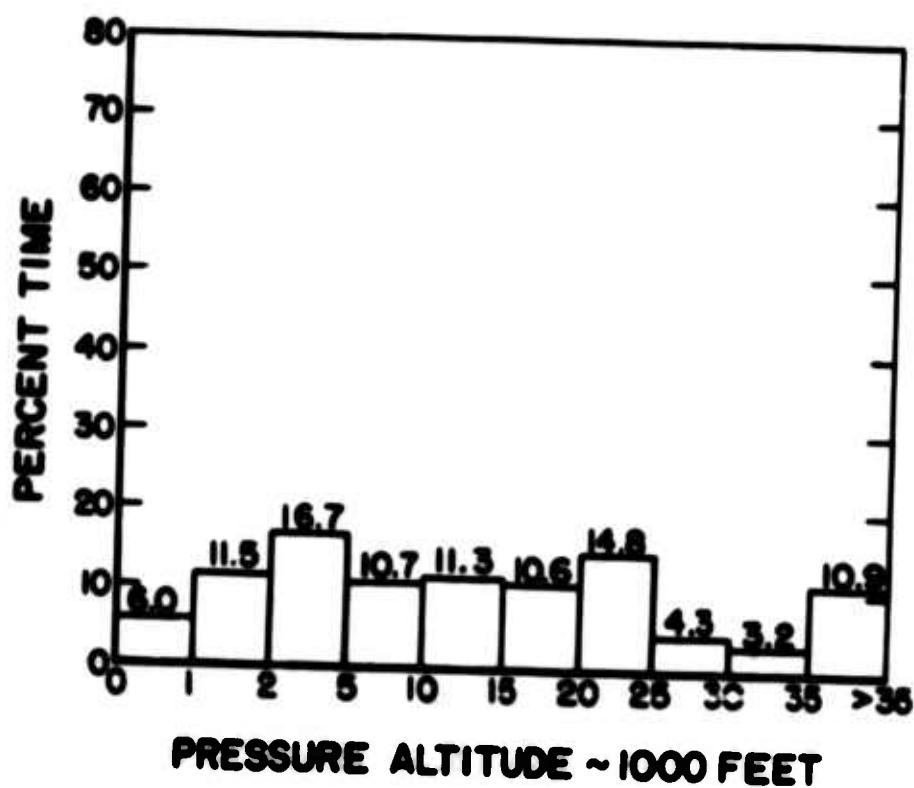


Figure B16 Percentages of the Total Flight Time Spent in the Various Altitude Bands for Flight Test Missions



TABLE B5  
DISTRIBUTION OF TIME (HOURS)  
BY ALTITUDE AND AIRSPEED INCREMENTS  
FOR THE  
LOGISTICS, MEDIUM RANGE MISSION

AIRSPEED (KNOTS)	BELOW 1	1 TO 2	2 TO 5	5 TO 10	ALTITUDE (1000 FT.)						ABOVE 35	TOTAL TIME	PERCENT TIME
					10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35				
BELOW 100	0.	0.02	0.	0.	0.	0.	0.	0.	0.	0.	0.02	0.00	
100 TO 150	17.61	16.43	12.24	0.03	0.	0.	0.01	0.	0.	0.	43.11	1.28	
150 TO 200	0.76	12.17	26.94	7.24	1.23	0.64	1.00	2.67	0.12	7.94	69.91	1.96	
200 TO 250	0.03	3.33	17.00	16.27	9.99	4.17	19.92	9.80	734.07	1430.01	2239.47	66.16	
250 TO 300	0.12	0.07	13.70	37.71	90.74	66.46	101.07	160.00	949.36	28.40	1017.49	30.23	
300 TO 350	0.	0.02	0.70	0.03	2.99	0.96	0.07	0.02	0.	0.	9.64	0.17	
350 TO 400	0.	0.	0.	0.	0.00	0.	0.	0.	0.	0.	0.00	0.00	
ABOVE 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
TOTAL	21.31	32.95	71.15	67.00	60.11	71.03	119.27	176.57	1283.94	1466.02	3365.65		
PERCENT	0.63	0.98	2.11	1.97	1.79	2.13	3.56	5.25	38.14	43.56		100.00	

TABLE B6  
DISTRIBUTION OF TIME (HOURS)  
BY ALTITUDE AND AIRSPEED INCREMENTS  
FOR THE  
LOGISTICS, LONG RANGE MISSION

AIRSPEED (KNOTS)	BELOW 1	1 TO 2	2 TO 5	5 TO 10	ALTITUDE (1000 FT.)						ABOVE 35	TOTAL TIME	PERCENT TIME
					10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35				
BELOW 100	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
100 TO 150	1.45	1.01	0.01	0.00	0.02	0.03	0.	0.	0.	0.	4.20	0.93	
150 TO 200	0.52	0.98	1.13	0.39	0.11	0.15	0.06	0.07	0.	1.01	6.43	1.86	
200 TO 250	0.02	0.34	1.22	1.63	0.40	0.17	0.15	0.22	59.12	100.00	364.15	80.21	
250 TO 300	0.00	0.07	1.32	2.73	1.69	4.56	5.15	6.54	52.04	1.00	77.10	17.00	
300 TO 350	0.	0.	0.00	0.01	0.03	0.	0.	0.	0.	0.	0.04	0.01	
350 TO 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
ABOVE 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
TOTAL	1.99	3.19	4.60	4.63	4.25	4.92	5.37	6.81	111.15	306.90	454.01	100.00	
PERCENT	0.44	0.70	0.99	1.00	0.94	1.00	1.10	1.30	24.40	67.62			

TABLE B7  
DISTRIBUTION OF TIME (HOURS)  
BY ALTITUDE AND AIRSPEED INCREMENTS  
FOR THE  
TRAINING MISSION

AIRSPEED (KNOTS)	ALTITUDE (1000 FT.)											TOTAL TIME	PERCENT TIME
	BELOW 1	1 TO 2	2 TO 5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35	ABOVE 35			
BELOW 100	0.07	2.06	0.47	0.	0.	0.	0.	0.	0.	0.	3.41	0.15	
100 TO 150	49.39	171.03	200.27	6.07	6.47	3.30	5.90	0.34	0.15	0.	538.60	24.13	
150 TO 200	10.42	87.25	364.77	39.63	13.29	31.06	62.65	1.93	0.19	6.94	629.70	28.20	
200 TO 250	1.33	9.66	123.94	93.42	40.62	102.98	170.16	1.91	10.08	60.07	567.69	26.31	
250 TO 300	1.70	1.33	23.46	61.05	60.44	100.00	193.10	10.12	23.90	1.59	461.99	20.67	
300 TO 350	0.10	0.	0.50	2.50	2.23	2.00	3.65	0.05	0.	0.	11.93	0.53	
350 TO 400	0.	0.	0.	0.01	0.00	0.	0.	0.	0.	0.	0.02	0.00	
ABOVE 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
TOTAL	63.00	260.16	690.40	104.37	141.00	247.10	395.51	23.36	43.00	77.00	2252.00		
PERCENT	2.80	12.01	30.29	7.36	6.32	11.07	17.71	1.05	1.93	3.45		100.00	



TABLE B8  
DISTRIBUTION OF TIME (HOURS)  
BY ALTITUDE AND AIRSPEED INCREMENTS  
FOR THE  
MISCELLANEOUS MISSION

AIRSPEED (KIAS)	ALTITUDE (1000 FT.)										TOTAL TIME	PERCENT TIME
	BELOW 1	1 TO 2	2 TO 5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35	ABOVE 35		
BELOW 100	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100 TO 150	0.22	0.88	0.11	0.	0.	0.	0.	0.	0.	0.	1.20	13.99
150 TO 200	0.05	0.61	0.32	0.	0.	0.	0.	0.	0.	0.	0.98	11.40
200 TO 250	0.41	1.25	0.53	0.35	0.	0.	0.	0.	0.	0.	2.54	29.49
250 TO 300	0.46	0.72	0.68	1.14	0.12	0.16	0.37	0.	0.	0.	3.65	42.40
300 TO 350	0.01	0.04	0.05	0.05	0.05	0.	0.04	0.	0.	0.	0.23	2.69
350 TO 400	0.00	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.00	0.04
ABOVE 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	1.15	3.50	1.69	1.55	0.16	0.16	0.41	0.	0.	0.	8.61	
PERCENT	13.37	40.62	19.64	17.96	1.84	1.84	4.74	0.	0.	0.		100.00

TABLE B9  
DISTRIBUTION OF TIME (HOURS)  
BY ALTITUDE AND AIRSPEED INCREMENTS  
FOR THE  
FLIGHT TEST MISSION

AIRSPEED (KIAS)	ALTITUDE (1000 FT.)										TOTAL TIME	PERCENT TIME
	BELOW 1	1 TO 2	2 TO 5	5 TO 10	10 TO 15	15 TO 20	20 TO 25	25 TO 30	30 TO 35	ABOVE 35		
BELOW 100	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100 TO 150	0.57	0.58	0.40	0.	0.02	0.	0.01	0.	0.	0.	1.58	10.51
150 TO 200	0.35	1.04	1.54	0.44	0.25	0.01	0.14	0.	0.	0.01	3.80	24.86
200 TO 250	0.00	0.12	0.38	0.66	0.76	0.73	0.89	0.11	0.24	1.66	5.56	36.33
250 TO 300	0.	0.02	0.23	0.51	0.68	0.83	1.21	0.55	0.25	0.	4.29	28.02
300 TO 350	0.	0.	0.00	0.00	0.02	0.03	0.01	0.	0.	0.	0.07	0.48
350 TO 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ABOVE 400	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	0.92	1.76	2.55	1.64	1.73	1.62	2.27	0.66	0.49	1.67	15.31	
PERCENT	6.01	11.48	16.60	10.69	11.33	10.56	14.83	4.29	3.19	10.94		100.00



TABLE B10  
DISTRIBUTION OF MANEUVER LEAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
LOGISTICS, REGULAR RANGE MISSION  
DATA SAMPLE

D-W-A BLOCK		BLOCK TYPE (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	LOAD FACTOR DISTRIBUTION (G)									
										1.2	1.3	1.4	1.5	1.6	1.8	2.0	2.5	3.0	
2	1	2	3.6	1						1									
2	2	2	4.0	3					2	1									
2	2	3	2.0	9					1	0									
2	2	4	1.5	9					1	4	4								
2	3	4	1.5	1						1									
2	3	5	0.5	0															
2	4	4	4.0	0															
2	4	5	5.7	0															
2	5	5	4.5	0															
2	6	5	2.0	0															
2	7	5	4.5	0															
2	8	4	1.0	0															
2	8	5	7.0	1						1									
2	9	4	10.0	0															
3	1	2	95.7	1						1									
3	1	3	40.5	0				1	1	5		1							
3	1	4	11.9	5						4									
3	2	2	110.0	9					2	6	1								
3	2	3	54.1	15					2	8	5								
3	2	4	29.3	18						16	2								
3	2	5	1.0	1						1									
3	3	2	29.5	4					1	3									
3	3	3	50.0	25				1	5	11	7	1							
3	3	4	74.9	53				1	4	36	10	2							
3	3	5	16.3	5						4									
3	4	1	27.1	12					0	3	1								
3	4	4	77.0	43					7	27	7	1							
3	4	5	95.0	19			1		4	13	2								
3	4	6	1.0	0															
3	5	4	20.1	10				1	3	5	1								
3	5	5	117.9	30				1	6	13	6	4							
3	5	6	3.0	0															
3	6	3	1.0	0															
3	6	4	27.4	20					5	13	2								
3	6	5	249.1	20					4	13	2	1							
3	6	6	5.0	1						1									
3	7	3	0.5	0															
3	7	4	24.2	15					3	9	3								
3	7	5	120.4	13					4	7	1	1							
3	8	4	22.2	9					5	2	2								
3	8	5	207.3	30				2	0	17	2	1							
3	9	3	2.0	0															
3	9	4	1172.4	42				7	9	20	5	1							
3	9	5	353.7	14					4	7	3								
3	10	3	1.0	0															
3	10	4	1594.1	19					10	9									
4	1	2	23.4	4						4									
4	1	3	2.7	0															
4	1	4	0.2	0															
4	2	2	42.1	2						2									
4	2	3	36.0	11					2	0		1							
4	2	4	7.7	5					1	4									
4	2	5	0.7	2						2									
4	3	2	11.7	3															
4	3	3	40.0	8						7	1								
4	3	4	47.4	20					5	10	0								
4	3	5	13.7	13					1	7	5								
4	4	3	2.5	0															
4	4	4	42.2	14					3	12	1								
4	4	5	96.0	11					2	9									
4	4	6	0.7	0															
4	5	4	15.7	15					4	9	1	1							
4	5	5	60.2	15				1	1	11	2								
4	6	4	11.0	2						2									
4	6	5	395.5	10					6	4									
4	7	4	5.5	3					1	1	1								
4	7	5	200.2	15				1	5	4	4	1							
4	8	4	0.0	2						2									
4	8	5	324.0	38				4	19	19	3	2							
4	9	4	4291.0	52				1	14	31	4	2							
4	9	5	1194.1	14					5	10	1								
4	10	4	7030.4	48				2	3	30	4	1							
4	10	5	3.0	0															
5	1	2	20.0	7					2	5									
5	1	3	13.7	2						2									
5	1	4	1.1	0															
5	2	2	1.4	0															
5	2	3	19.5	6					1	5									
5	2	4	3.0	5						5									
5	2	5	1.0	4						3	1								
5	3	3	15.2	0															
5	3	4	22.7	15					3	10	2								
5	3	5	35.4	44				2	4	20	7	1							
5	3	6	C.5	0															
5	4	4	2.0	2					1	1									
5	4	5	105.4	24					7	13	2								
5	4	6	1.0	0															
5	5	4	0.5	0															
5	5	5	155.5	0					1	5	2								
5	6	5	221.5	10						0	2								
5	7	4	1.0	0															
5	7	5	348.2	14					1	10	4	1							
5	7	6	1.0	3						3									
5	8	4	0.0	1					1										
5	8	5	393.7	40					5	24	0	1							
5	9	4	6460.4	97			2	4	9	19	52	11	4	2					
5	9	5	1637.1	13			1			2	0	1	1						
5	10	3	5.5	0															
5	10	4	4022.1	60			2	3	1	12	29	5	6	2					
5	10	5	3.0	0															



TABLE 210 CONTINUED  
DISTRIBUTION OF AIRBORNE LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
LOGISTICS, REGIONAL RANGE MISSION  
DATA SAMPLE

U-M-A BLOCK	CLOCK TIME (MM)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
6 1 2	19.3	7						1	7							
6 1 3	20.3	0						1	0							
6 1 4	21.3	1							1							
6 1 5	22.1	0														
6 2 2	23.0	0														
6 2 3	24.2	13						6	6	1						
6 2 4	25.6	8						2	6							
6 2 5	26.0	3						2	1							
6 3 3	28.0	2						1	1							
6 3 4	29.7	23						8	14	3	1					
6 3 5	31.3	47					1	4	32	8	1	1				
6 3 6	32.2	4							2	2						
6 4 4	34.1	9							8		1					
6 4 5	35.9	50						12	20	8	2					
6 4 6	37.5	0														
6 5 4	39.7	8														
6 5 5	41.9	12						4	5	2	1					
6 5 6	43.2	0														
6 6 3	45.5	2						1								
6 6 5	48.6	31				1	3	8	14	3	1	1				
6 6 6	50.0	1							1							
6 7 4	53.0	0														
6 7 5	54.3	8						1	3	4						
6 8 4	57.0	0														
6 8 5	59.2	14					2	3	7		2					
6 9 4	63.5	15					1	4	8	1	1					
6 9 5	64.8	20					1	8	13	1	3	1	1			
6 10 4	67.5	1						1								
TOTAL	36791.5	1427	0	0	5	9	46	279	883	178	49	7	1	0	0	0



TABLE B11  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

M-MH-A BLOCK	BLOCK TYPE (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)														
			-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0	
2 1 7	7.0	19						2	19	2							
2 2 2	48.9	41					1	8	31	1							
2 2 3	8.4	15					2	2	10	1							
2 3 2	15.9	13						3	9	1							
2 3 1	12.6	26					1	1	19	5							
3 1 1	1.2	0															
3 1 2	33.9	31					1	6	21	2	1						
3 1 3	3.4	11						3	8								
3 2 2	60.4	96					1	9	44	2							
3 2 3	31.5	65						9	50	6							
3 2 4	9.0	17						2	10	5							
3 3 2	24.5	28					4	2	18	3	1						
3 3 3	25.9	37						6	27	4							
3 3 4	17.0	73					1	12	39	10	3						
3 3 5	1.4	2							2								
3 4 3	2.7	0															
3 4 4	0.2	15				2	1	3	4	3	2						
3 4 5	13.0	10				1	1	6	10								
3 4 6	1.0	2								1	1						
3 5 4	1.0	0															
3 5 5	4.8	8						2	4	2							
3 6 4	1.0	1							1								
3 6 5	5.5	5					2	2	1								
3 7 4	0.5	1						1									
3 7 5	8.5	17					2	11	4								
3 8 4	0.5	3					1	2									
3 8 5	23.0	27				1		10	7	4							
3 9 4	2.5	4					1	3									
3 9 5	1.0	1						1									
3 10 4	247.0	7						2	5								
4 1 2	0.5	1							1								
4 1 3	0.5	0															
4 2 2	0.8	5						1	4								
4 2 3	5.2	15						2	9	3	1						
4 3 4	1.2	1							1								
4 3 5	0.8	3							1	2							
4 4 4	1.7	0															
4 4 5	2.0	2							2								
4 5 4	1.0	1							1								
4 5 5	2.0	0															
4 6 3	6.0	0															
4 6 4	9.8	4						3		1							
4 6 5	4.0	3					1	2									
4 7 4	4.0	1							1								
4 8 4	54.0	3							2	1							
4 10 4	398.0	9							9								
5 1 2	1.3	1							3								
5 2 1	1.5	1					1										
5 3 1	1.2	1							1								
5 3 4	1.0	1						1									
5 3 5	1.4	4						2	1	1							
5 4 4	1.6	0															
5 4 5	2.5	6						1	4	1							
5 5 5	5.0	0															
5 6 5	4.5	4						1	1	1	1						
5 7 5	7.0	0															
5 8 5	8.0	0															
5 9 4	55.0	0															
5 9 5	4.0	0															
5 10 4	204.0	6							6								
TOTAL	1400.2	612	0	0	0	4	21	121	306	70	10	0	0	0	0	0	



TABLE B12  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
HISSELMAN'S MISSION  
DATA SAMPLE

N-MH-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)													
			-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
2 1 2	9.7	0						2	2	2						
2 1 3	2.2	1							1							
2 1 4	1.6	1								1						
2 1 5	1.2	1						1								
2 2 2	9.0	3							2	1						
2 2 3	3.9	10							9	1						
2 2 4	30.0	24						1	13	3	4	1				
2 2 5	2.6	4						4								
2 3 1	7.0	0														
2 1 4	9.0	10							0	2						
2 3 1	10.2	27						3	10	3	1					
2 3 6	1.1	5						3	1		1					
3 1 2	2.0	0														
3 1 4	22.2	30					1	19	16		2					
3 1 5	26.2	21					2	4	12	3						
3 1 6	0.5	4						1	1	1		1				
3 1 7	0.2	1														
3 2 2	44.9	4						1	3							
3 2 3	22.6	6							3							
3 2 4	44.0	35						7	10	7	3		1			
3 2 5	40.0	10					1	2	6	1						
3 2 6	7.5	1						1								
3 3 2	6.5	0														
3 3 3	12.3	0														
3 3 4	21.5	25						5	17	3						
3 3 5	20.1	19							6	7	2					
3 3 6	7.0	1							1							
3 4 4	10.6	12						3	0	1						
3 4 5	52.7	31						5	21	5						
3 4 6	0.5	0														
3 5 3	3.0	6						2	3	1						
3 6 3	2.5	6						1	3							
4 1 2	0.6	1							1							
4 1 3	0.9	3							1							
4 1 4	0.7	1							3							
4 1 5	0.3	4						4			1					
4 2 4	0.5	0														
4 2 5	0.5	2							2							
4 3 4	0.3	0														
4 3 5	2.7	11						1	9	1						
4 4 4	2.6	0														
4 4 5	19.6	1							1							
4 4 6	7.0	0														
4 5 3	4.5	0														
4 5 6	2.0	2							1		1					
4 6 3	7.0	3						1	1	1						
4 7 3	22.0	6					3	1	2							
4 7 6	2.5	0														
TOTAL	516.0	344	0	0	0	0	7	74	100	46	16	3	0	0	0	0

TABLE B13  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

N-MH-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)													
			-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
3 1 2	6.0	1						1								
3 1 3	9.2	5							4	1						
3 1 4	0.5	5							1	3	1					
3 2 4	0.9	5					1		3	1						
3 2 5	0.1	1						1								
3 3 4	2.5	7						2	4	1						
3 3 5	0.5	1							1							
3 4 4	2.4	7							4	3						
3 4 5	1.6	5					1	2	2							
3 5 4	2.0	2						1	1							
3 5 5	1.0	0														
3 6 4	6.6	1						1								
3 6 5	1.9	2								1						
3 7 4	5.5	4						1								
3 7 5	5.5	5							3	1	2					
3 8 4	1.0	0														
3 8 5	7.0	7						3		3	1					
3 9 4	3.5	3						2	1							
3 9 5	1.0	0						1	4	1						
3 10 4	27.5	1														
TOTAL	81.0	70	0	0	0	0	2	19	33	16	4	0	0	0	0	0



DATA SAMPLE 9

BLOCK	DLOCK TIME (min)	TOTAL PAINS	LOAD FACTOR DISTRIBUTION (%)												
			-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5
2	1	7	10.4	1							1				
2	2	2	13.2	0											
2	2	3	9.7	1							1				
2	2	4	1.0	1					1						
2	3	2	4.3	0											
2	3	3	0.0	1						1					
2	3	4	9.9	0											
2	3	5	9.9	2						2					
2	4	2	1.7	0											
2	4	3	10.3	0											
2	4	4	0.9	7						1	1				
2	4	5	9.5	0											
2	4	6	1.0	1						1					
2	5	3	1.0	0											
2	5	4	9.0	17				1	9	9	2				
2	5	5	3.0	3					1	2					
2	6	3	0.5	0											
2	6	4	4.0	6					2	4					
2	6	5	91.5	7					2						
2	7	4	5.0	5					3	2					
2	7	5	22.5	0											
2	8	4	2.5	3					2	1					
2	8	5	9.0	3					1	2					
2	9	4	4.3	0											
2	9	5	14.0	1					1						
2	10	3	1.0	1					3						
2	10	4	139.0	1						1					
3	1	2	76.9	14					2	12					
3	1	3	27.2	37					7	24	2				
3	1	4	7.4	4						4					
3	2	2	173.5	22					5	16	1				
3	2	3	94.2	33				1	9	24	3				
3	2	4	27.5	19						17	2				
3	2	5	1.0	1						1					
3	3	2	97.2	23					4	17	2				
3	3	3	160.0	57				2	19	30	2				
3	3	4	131.4	71					10	94	7				
3	3	5	99.5	60					11	43	13	1			
3	3	6	1.4	4					1	3					
3	4	2	4.4	0											
3	4	3	43.3	23				2	6	12	2	1			
3	4	4	122.5	66				2	10	45	9				
3	4	5	145.0	90				1	14	31	4				
3	4	6	7.7	7					1	6					
3	5	3	1.0	0											
3	5	4	29.6	17					5	10	1	1			
3	5	5	157.9	35				1	0	25		1			
3	5	6	12.7	0					5	4					
3	6	3	0.2	0											
3	6	4	1.2	0											
3	6	5	30.0	25					1	10	11	2	1		
3	6	6	236.3	46			1	1	12	26	4	2			
3	6	7	7.7	3					1	1	1				
3	7	4	15.1	1					1	1					
3	7	5	204.7	51			1	1	15	29	4	1			
3	7	6	4.5	4						3		1			
3	8	4	5.0	4					1	2	1				
3	8	5	325.0	47					1	13	24	4			
3	8	6	0.5	0											
3	9	4	1900.4	94					1	19	61	11	2		
3	9	5	913.7	27					6	5	15	1			
3	10	4	2504.5	74					3	22	46	3			
3	10	5	160.2	11			1			2	7	1			
4	1	2	40.7	20					1	3	23	2			
4	1	3	24.0	16						1	15				
4	1	4	2.9	6							4	2			
4	2	2	32.9	3							3				
4	2	3	44.0	0			1			4	3				
4	2	4	4.5	3				1			2				
4	3	2	31.4	1							1				
4	3	3	04.0	17						5	11	1			
4	3	4	70.1	30					1	9	23	10			
4	3	5	93.4	40					3	4	59	15	0		
4	3	6	9.6	17					1	1	0	5	2		
4	4	3	19.9	1							1				
4	4	4	39.4	14						1	12	1			
4	4	5	91.4	71					2	21	42	6			
4	4	6	5.9	6							5	1			
4	5	3	4.5	6						1	5				
4	5	4	29.0	11						1	10				
4	5	5	117.0	20						3	12	5			
4	5	6	4.1	2							1	1			
4	6	3	5.0	1							1				
4	6	4	22.0	15							14				
4	6	5	146.1	14						1	9				
4	7	2	0.5	1											
4	7	4	0.9	0											
4	7	5	245.0	35						10	16	5	2		
4	7	6	1.0	0											
4	8	4	20.7	7						1	1				
4	8	5	029.4	50			1	4		10	32	4	1	1	
4	9	4	6200.4	51				2		14	29	6			
4	9	5	2710.3	73			1	3		10	49	8	2		
4	10	3	0.7	0											
4	10	4	0040.0	100				1	3	20	66	9	1		
4	10	5	216.5	2						1	1				
5	1	2	20.0	11							10	1			
5	1	3	21.9	0						1	7	1			
5	1	4	2.4	1							1				
5	1	5	1.1	2							2				



TABLE B14 continued  
 DISTRIBUTION OF MANEUVER LOAD FACTORS  
 FOR THE  
 SEVEN AIR FORCE BASE  
 LOGISTICS, NEWTON RANGE MISSION  
 DATA SAMPLE

U-NO-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR DISTRIBUTION (G)										
								0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0		
5 2 2	2.3	4							1	3								
5 2 3	20.2	14					2	4	0									
5 2 4	5.0	6						2	3	1								
5 2 5	3.0	6							3	1								
5 3 2	1.0	5						3	1		1							
5 3 3	10.9	11						6	5									
5 3 4	25.4	45						9	34	4	2							
5 3 5	61.6	73			1		1	7	93	11								
5 3 6	10.3	4							3	1								
5 4 3	1.0	0																
5 4 4	3.7	0																
5 4 5	110.3	41					1	7	20	3								
5 4 6	4.0	5							4	1								
5 4 7	1.7	0																
5 5 5	145.2	22						3	16	2	1							
5 5 6	2.0	1							1									
5 6 3	0.5	0																
5 6 4	9.0	0																
5 6 5	195.2	14					1	1	11	1								
5 6 6	9.3	0																
5 7 4	1.3	0																
5 7 5	303.5	12						3	0	1								
5 7 6	27.0	1							1									
5 8 4	8.7	0																
5 8 5	694.9	31					2	6	20	1	2							
5 9 3	1.0	0																
5 9 4	9312.2	59						5	11	41	2							
5 9 5	1030.4	34						2	9	32	9	2						
5 10 3	10.3	6				1	1	4										
5 10 4	6101.9	113				1	7	20	75	10	4							
5 10 5	57.7	0																
6 1 2	12.3	5							5									
6 1 3	34.4	13						1	12									
6 1 4	2.9	0																
6 1 5	0.7	0																
6 2 2	0.5	0																
6 2 3	20.0	7						1	4									
6 2 4	0.9	5							5									
6 2 5	0.0	3							3									
6 2 6	0.5	1								1								
6 3 2	1.0	1																
6 3 3	14.4	0						5	3									
6 3 4	21.1	24						3	21									
6 3 5	95.0	77					4	15	45	11	2							
6 3 6	11.0	15						1	0	2	2							
6 4 4	5.7	2					1	1										
6 4 5	112.2	43						5	90	7	1							
6 4 6	4.0	4							3	1								
6 5 4	2.0	1						1										
6 5 5	190.0	2							2									
6 5 6	5.0	0																
6 6 4	0.5	0																
6 6 5	142.0	5							3									
6 6 6	2.0	0																
6 7 4	4.3	2						2										
6 7 5	107.1	10						1	10									
6 7 6	0.7	3						1	2									
6 8 4	0.0	0																
6 8 5	341.1	12						2	10									
6 9 4	471.0	17						4	11	2								
6 9 5	311.0	21						6	13	2								
6 10 4	740.5	12						4	7									
TOTAL	46002.3	2364	0	0	3	7	74	515	1075	242	47	1	0	0	0	0		



TABLE B15  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
LOGISTICS, LONG RANGE MISSION  
DATA SAMPLE

N-W-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)												
			-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5
2 10 3	54.0	0													
3 1 3	2.2	0													
3 2 3	4.5	0													
3 2 4	0.5	0													
3 3 4	2.0	0													
3 4 4	4.0	0													
3 5 4	1.0	0													
3 5 4	1.0	0													
3 5 5	3.0	1							1						
3 6 5	3.0	0													
3 7 5	2.0	1						1							
3 8 5	2.0	1							1						
3 9 4	16.0	0								1					
3 10 3	174.0	1									1				
3 10 4	108.0	0													
4 9 4	161.0	0													
4 10 3	49.0	3						1	4						
4 10 4	232.0	1								1					
5 9 4	209.0	0													
5 10 4	250.0	11				1		1	0	1					
6 1 3	1.6	0													
6 2 4	0.4	0													
6 2 5	0.5	0													
6 3 5	1.0	0													
6 4 5	2.5	0													
6 5 5	5.0	2							2						
6 6 5	6.0	0													
6 7 5	6.0	2							2						
6 8 4	2.0	0													
6 8 5	9.0	0													
6 9 4	92.0	17					2	4	7	2	2				
6 9 5	1.0	0													
TOTAL	1189.1	42	0	0	0	1	2	7	27	3	2	0	0	0	0



FOR THE  
SOVIET AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE:

152



TABLE B16 continued  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
COVER AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

U-28-A BLOCK		BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)													
				-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.5	1.6	2.0	2.5	3.0
0	2	4	0.4	0													
0	3	3	1.0	1													
0	3	4	3.0	1													
0	3	5	27.0	42				2	7	26	5	2					
0	3	6	3.0	0													
0	4	4	1.0	0													
0	4	5	20.4	1					9								
0	4	6	0.2	1						1							
0	5	5	22.0	0					2	7							
0	6	6	24.0	0													
0	7	1	20.0	1													
0	8	4	150.0	0													
0	8	4	100.1	11					2	9	1						
0	9	3	170.1	111					1	69	20	5					
0	10	1	200.0	10					1	0	1						
0	10	1	3.0	0													
TOTAL		0000.0	6123	0	1	17	35	177	763	3799	1041	310	20	2	0	0	0

TABLE B17  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
COVER AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

U-28-A BLOCK		BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)													
				-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.5	1.6	2.0	2.5	3.0
3	1	2	10.0							9	1						
3	1	3	4.2						1	0	2	1					
3	2	2	12.0						2	3							
3	2	3	32.0						3	0							
3	2	4	7.0							2							
3	2	5	14.1						4	3							
3	3	4	9.0							5	1						
3	3	5	7.0						1	0	0	3	7				
3	4	3	0.0							1							
3	4	4	1.0							1							
3	4	5	3.7							2							
3	5	3	5.2														
3	5	4	12.0						1	9	2						
3	5	5	7.0						1	4							
3	6	3	0.0														
3	6	4	37.7						1								
3	6	5	13.0							0	1	1					
3	7	4	10.0							1							
3	7	5	0.0							0							
3	8	3	21.0						1	1							
3	9	4	2.0							2							
3	9	5	12.0						1	3		4	4				
4	1	0	3.0														
4	1	2	1.0							1	1						
4	1	3	1.0														
4	2	3	0.0														
4	2	4	0.3														
4	2	5	1.2														
4	3	4	3.1						1	1							
4	3	5	4.0							2							
4	3	6	0.2							1							
4	4	5	5.0					1		1							
4	4	6	0.3														
4	5	1	4.0														
4	5	3	1.0														
4	5	5	0.0														
4	5	6	1.0														
TOTAL		200.0	144	0	0	0	0	1	23	67	22	9	2	0	0	0	0



TABLE D10  
DISTRIBUTION OF MEASURED LOAD FACTORS  
FOR THE  
THUNDER AND POWER BASE  
LOGISTICS, RECONNAISSANCE DIVISION  
DATA SAMPLE

D-400-4 SLOCH	SLOCH TIME (HRS)	TOTAL PLANS	LOAD FACTOR DISTRIBUTION (%)											
			-0.1	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
2	1.3	0												
2	4.5	1												
2	1.0	7												
2	20.5	3												
2	22.0	7												
2	2.4	2												
2	1.4	1												
2	0.2	2												
2	5.4	7												
2	2.0	1												
2	10.2	1												
2	5.0	1												
2	15.5	2												
2	0.5	0												
2	2.0	0												
2	12.7	2												
2	0.1	0												
2	04.5	0												
2	9.0	0												
2	1.0	0												
2	41.0	0												
2	13.0	2												
2	0.5	0												
2	35.0	10												
2	7.4	0												
2	1.0	7												
2	40.5	10												
2	01.5	06												
2	40.0	57												
2	7.1	10												
2	4.7	7												
2	2.4	0												
2	27.0	12												
2	32.5	0												
2	1.5	0												
2	94.0	0												
2	2.0	0												
2	34.2	0												
2	2.0	0												
2	201.1	0												
2	7.5	1												
2	203.0	1												
2	155.2	1												
2	151.2	11												
2	412.2	0												
2	0.1	0												
2	2.0	0												
2	0.0	0												
2	0.1	0												
2	17.1	0												
2	4.5	1												
2	1.5	1												
2	0.0	2												
2	27.4	20												
2	20.6	10												
2	0.4	12												
2	0.0	1												
2	11.0	11												
2	20.7	30												
2	0.1	1												
2	0.1	1												
2	1.0	2												
2	44.1	0												
2	1.5	0												
2	740.7	0												
2	0.5	1												
2	147.5	7												
2	447.3	11												
2	540.7	11												
2	290.0	1												
2	0.0	1												
2	0.1	0												
2	0.4	0												
2	0.0	0												
2	0.4	3												
2	4.7	3												
2	4.5	0												
2	3.1	0												
2	7.5	0												
2	0.0	0												
2	175.0	15												
2	110.0	1												
2	277.0	1												
2	1.0	0												
2	7.0	2												
2	2.0	2												
2	0.2	0												
2	2.1	2												
2	4.1	2												
2	0.5	0												
2	1.5	0												
2	3.5	0												
2	4.5	0												
2	4.0	0												
2	0.5	0												
2	7.7	0												
2	35.3	0												
2	104.0	1												
TOTAL	4004.5	400	0	0	0	1	0	00	300	00	2	0	0	0



TABLE B10  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
TYPICAL AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

U-CLASS	CLASS	TOTAL	-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.5	1.6	1.8	2.0	2.5	3.0
CLASS	TIME	POINTS															
	(MIN)																
2	1	27.7	2														
2	1	270.1	461														
2	1	49.7	140														
2	1	4.7	43														
2	1	20.8	12														
2	2	2702.0	2300														
2	2	2702.0	1100														
2	2	20.8	144														
2	2	1.9	12														
2	2	21.3	1														
2	2	2011.7	9169														
2	2	2024.7	6064														
2	2	1176.4	3063														
2	2	102.7	824														
2	2	0.0	25														
2	2	120.1	153														
2	2	400.3	374														
2	2	472.4	1144														
2	2	934.3	1442														
2	2	04.7	63														
2	2	0.0	0														
2	2	04.2	16														
2	2	120.2	70														
2	2	200.2	767														
2	2	022.2	946														
2	2	00.2	44														
2	2	04.3	17														
2	2	200.1	170														
2	2	1204.0	1200														
2	2	1440.7	1272														
2	2	49.1	20														
2	2	20.1	6														
2	2	472.3	396														
2	2	1133.9	1372														
2	2	1420.2	1157														
2	2	04.0	9														
2	2	1.0	4														
2	2	101.0	23														
2	2	0.0	1														
2	2	10.0	10														
2	2	20.0	9														
2	2	20.0	22														
2	2	10.7	19														
2	2	10.0	1														
2	2	10.0	1														
2	2	001.0	700														
2	2	142.7	299														
2	2	0.0	12														
2	2	0.0	11														
2	2	0710.7	3011														
2	2	1000.2	3000														
2	2	01.4	231														
2	2	0.0	10														
2	2	0.2	3														
2	2	0037.3	3000														
2	2	10100.0	13121														
2	2	2773.0	6054														
2	2	200.7	1350														
2	2	0.2	24														
2	2	200.0	102														
2	2	720.2	462														
2	2	1120.2	1047														
2	2	1314.1	2024														
2	2	00.4	37														
2	2	0.0	6														
2	2	140.1	31														
2	2	021.0	154														
2	2	1224.0	1232														
2	2	1939.1	1717														
2	2	42.4	100														
2	2	0.2	1														
2	2	132.0	37														
2	2	1007.0	904														
2	2	2700.0	1500														
2	2	2003.0	2704														
2	2	04.7	124														
2	2	200.4	120														
2	2	2230.7	1470														
2	2	0070.7	6047														
2	2	0940.3	3617														
2	2	213.1	103														
2	2	0.1	1														
2	2	70.0	31														
2	2	74.1	100														
2	2	270.2	104														
2	2	0.3	1														
2	2	1.0	0														
2	2	244.1	100														
2	2	201.7	249														
2	2	03	03														
2	2	200.1	80														
2	2	000.0	201														
2	2	03.7	5														
2	2	1.1	0														
2	2	200.0	244														
2	2	05.0	124														
2	2	0.2	0														
2	2	1.7	0														
2	2	700.0	645														
2	2	000.0	1019														
2	2	20.0	109														



TABLE B19 continued  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
YINKER AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

W-NO-A BLOCK	CLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.5	1.6	1.8	2.0	2.5	3.0
9 2 5	0.9	4							1	3							
4 3 1	0.3	0															
4 3 2	1518.0	970				4	17	246	396	95	12						
4 3 3	5104.2	7580			1	15	166	1293	4981	987	136						
4 3 4	1926.6	2614				7	64	371	1626	453	90						
4 3 5	163.9	421				3	13	66	201	96	41						
4 3 6	2.9	15						1	5	4	3						
4 4 2	61.6	30					1	7	22								
4 4 3	988.2	1261				2	30	213	801	189	30						
4 4 4	595.2	915				1	2	30	135	590	165						
4 4 5	737.4	895				4	7	28	160	499	140						
4 4 6	16.8	19						7	8	3							
4 5 2	15.7	2						1	1								
4 5 3	171.1	47						7	25	8	1						
4 5 4	298.5	266				2	7	37	149	43	22						
4 5 5	762.1	689				3	10	108	394	128	71						
4 5 6	13.3	24					1	2	14	4	1						
4 6 2	4.4	4						3	3	1							
4 6 3	191.3	89				1	1	8	60	11							
4 6 4	658.7	722				4	18	103	372	121	87						
4 6 5	1110.9	811				3	20	104	409	139	100						
4 6 6	17.2	29					2	2	9	5	7						
4 7 2	23.0	6						1	5								
4 7 3	403.8	292				4	5	33	136	21	3						
4 7 4	1248.2	1338				9	19	124	727	250	176						
4 7 5	1674.7	1080				2	5	27	308	174	137						
4 7 6	22.7	13					1	1	7	2	1						
4 8 2	C.3	2				1			1								
4 8 3	2.1	1						1									
4 8 4	6.9	6						1	3		1						
4 8 5	103.1	65					1	23	29	8	3						
4 8 6	3.0	2						2									
4 9 3	36.0	11					2	4	2	2	1						
4 9 4	38.5	58				2	2	12	32	8	2						
4 9 5	25.8	22					1	7	8	6							
4 10 3	3.0	C															
4 10 4	41.2	22						4	11	3	2						
4 10 5	19.4	2							2								
5 1 2	30.6	18				1		2	23	2							
5 1 3	12.3	10						1	7	2							
5 2 1	C.9	C															
5 2 2	124.8	99					1	18	76	4							
5 2 3	164.2	202					1	22	193	25	1						
5 2 4	6.9	5						1	4								
5 2 5	C.5	C															
5 3 1	C.4	0															
5 3 2	115.7	30					2	15	27	5	1						
5 3 3	795.7	721					12	140	464	93	12						
5 3 4	344.9	357				1	8	52	239	41	15						
5 3 5	79.4	198					2	15	96	35	9						
5 3 6	0.3	1									1						
5 4 2	3.0	4						3	3								
5 4 3	83.5	91					3	24	49	14	1						
5 4 4	192.9	112					3	22	66	17	4						
5 4 5	312.2	311				1	6	95	181	56	12						
5 4 6	4.7	8						4	3	1							
5 5 2	C.6	3						1	2								
5 5 3	48.9	7						2	5								
5 5 4	127.7	131					1	14	79	23	9						
5 5 5	993.3	261				2	1	31	167	35	21						
5 5 6	5.6	17						3	5	8	1						
5 6 2	4.4	5							4	1							
5 6 3	116.6	62						14	43	5							
5 6 4	538.8	474				1	2	19	297	66	24						
5 6 5	654.7	440				3	3	16	229	60	35						
5 6 6	5.4	12						1	3	2	4						
5 7 2	13.8	12							11	1							
5 7 3	307.6	144				2	3	2	105	15	3						
5 7 4	1194.1	1068				2	2	24	96	161	143						
5 7 5	1349.0	701				1	7	16	107	102	95						
5 7 6	24.2	24						4	14	1	3						
5 8 3	34.5	25					2		4	18	1						
5 8 4	29.7	23				1		1	15	2							
5 8 5	101.3	42					2	3	7	20	5						
5 9 3	48.5	23				1		1	3	14	2						
5 9 4	34.2	43						2	5	28	4						
5 9 5	63.8	19					1	5	8	4							
5 10 3	15.0	7						3	3	1							
5 10 4	73.7	27						4	21	2							
TOTAL	115719.7	122035	0	3	159	547	3200	20238	724781	7600	6646	920	125	30	1	0	



TABLE B20  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
TINKER AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

M-M-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
3 2 2	4.9	3						1	1	1						
3 2 3	0.5	0														
3 3 2	14.0	1							1							
3 3 3	36.9	5						1	4							
3 3 4	4.4	1						1								
3 4 3	5.0	0														
3 4 4	23.0	0						1	7							
3 4 5	9.7	10					1	3	6							
3 5 4	0.0	2							2							
3 5 5	3.9	1							1							
3 6 4	0.5	1							1							
3 6 5	4.0	2						1	1							
3 7 3	6.3	2						1	1							
3 7 4	10.6	7						1	1							
3 7 5	19.9	12					2	1	4	1	1					
3 7 6	0.5	0						1	0							
3 8 4	4.3	0														
3 8 5	2.3	2							2							
3 9 4	0.3	5						1	4							
3 9 5	0.3	2							2							
3 10 4	50.0	12						1	9	2						
4 2 2	1.4	3							3							
4 2 3	0.4	0														
4 3 3	1.3	0														
4 3 4	0.5	0														
4 4 3	4.6	0														
4 4 4	1.9	0														
4 4 5	4.2	6							5	1						
4 5 4	4.0	1						1								
4 5 5	4.5	0														
4 6 5	2.1	0														
4 7 5	0.4	1							1							
TOTAL	250.4	47	0	0	0	0	3	14	63	5	2	0	0	0	0	0



TABLE B31  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
TRAVIS AIR FORCE BASE  
LOGISTICS, MEDIUM RANGE MISSION  
DATA SAMPLE

W-W-A BLOCK	CLCK TIME (MIN)	TO PE	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR DISTRIBUTION (%)										
								0.0	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0		
2 1 2	9.0	4						1	3									
2 2 2	20.7	2						1	1	1								
2 2 3	0.5	0																
2 2 4	3.0	3							3									
2 3 2	47.7	16						1	17									
2 3 3	13.8	6					1	1	2	2								
2 3 4	15.7	16			1			1	12	3								
2 3 5	2.2	1							1									
2 4 3	2.0	0																
2 4 4	17.8	8					1	3	3	1								
2 4 5	22.5	2							1	1								
2 5 4	2.9	1								1								
2 5 5	19.6	5						1	1	3								
2 6 4	1.0	0																
2 6 5	18.6	3							2	1								
2 7 4	4.0	3					1	2										
2 7 5	19.5	4					1	1	2									
2 8 4	2.0	1							1									
2 8 5	41.1	3					1	1			1							
2 9 4	35.1	11			1	1		3	5		1							
2 9 5	18.5	2						1	1									
2 10 4	43.0	3						2	1									
2 10 5	17.5	0																
3 1 2	194.5	30						4	23	3								
3 1 3	23.5	12						4	7	1								
3 1 4	36.3	4						2	2									
3 2 2	340.9	59						12	45	2								
3 2 3	98.5	23						3	17	3								
3 2 4	31.3	16							12	4								
3 2 5	4.2	4							4									
3 3 2	296.6	44			1			4	36	3								
3 3 3	412.5	113				3		14	86	10								
3 3 4	233.4	134			1	1		7	102	19	4							
3 3 5	94.6	74				2		4	46	19	2	1						
3 3 6	1.7	3							2		1							
3 4 2	29.0	3						2	1									
3 4 3	149.5	32					2	0	21		1							
3 4 4	327.4	104						16	66	18	3	1						
3 4 5	326.8	101			1	2		11	68	15	4							
3 4 6	11.7	5							4									
3 5 3	29.3	1						2		1								
3 5 4	92.9	35				1		3	21	7	1							
3 5 5	397.2	72			1	2		11	48	9	1							
3 5 6	4.0	C																
3 6 3	14.1	C																
3 6 4	81.0	22			1	1	2	9	9									
3 6 5	530.5	54					2	7	38	6	1							
3 6 6	0.5	C																
3 7 3	32.5	9					1		7	1								
3 7 4	158.1	28						6	18	3	1							
3 7 5	1055.1	80					1	12	92	10	5							
3 7 6	2.5	C																
3 8 3	66.5	C																
3 8 4	92.6	17						3	11	3								
3 8 5	1791.9	70				1	1	15	40	11	2							
3 9 3	4.0	C																
3 9 4	2764.2	56			2	1	4	13	27	6	2			1				
3 9 5	2522.2	38				2		12	13	7	2	2						
3 10 3	102.8	24					1	1	22									
3 10 4	6132.8	116			1	4	2	28	59	17	4	1						
3 10 5	297.1	0																
4 1 2	142.1	37						2	29	1								
4 1 3	37.9	12						3	9									
4 1 4	1.8	2						1		1								
4 1 5	0.3	0																
4 2 1	1.0	0																
4 2 2	152.7	13						2	10	1								
4 2 3	159.4	74						11	54	6								
4 2 4	30.1	20						2	15	2	1							
4 2 5	4.7	9						1	6	2								
4 3 2	122.3	13					2	3	8									
4 3 3	426.9	122			1			21	87	9	2							
4 3 4	175.5	110					2	12	77	17	2							
4 3 5	89.9	151				1	3	23	96	24	4							
4 3 6	3.3	6							4	1	1							
4 4 2	9.3	0																
4 4 3	118.5	20						3	17									
4 4 4	273.7	59				1		7	45	4	2							
4 4 5	346.1	148				1	3	24	74	30	14	1		1				
4 4 6	2.7	1							1									
4 5 3	32.4	1							1									
4 5 4	70.3	28			1	1	2	4	15	3	1							
4 5 5	604.5	94					1	11	30	5	4	1	1					
4 5 6	12.0	5						1	2	2								
4 6 3	14.2	4						2	1	1								
4 6 4	35.7	10						1	6	1								
4 6 5	611.4	36					1	10	23	2								
4 6 6	3.5	0																
4 7 3	26.0	1							1									
4 7 4	299.0	7							6	1								
4 7 5	1004.0	32				1	1	7	22	1								
4 7 6	3.5	0																
4 8 3	94.0	C																
4 8 4	129.5	1							1									
4 8 5	1630.8	45						8	30	5	2							
4 8 6	0.5	0																
4 9 4	6384.4	61			1		6	16	31	5	2							
4 9 5	8484.3	81				2	8	12	44	9	6							
4 10 3	190.5	0																
4 10 4	24942.2	151			2	5	10	36	82	11	4	1						



TABLE B21 concluded  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
TRAVIS AIR FORCE BASE  
LOGISTICS, MEDIUM RANGE MISSION  
DATA SAMPLE

W-M-A BLOCK	BLCCR TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)													
			-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
4 10 5	576.7	0														
4 1 2	63.5	26						3	22	1						
5 1 3	98.5	32						1	29	2						
5 1 4	7.0	1							1							
5 1 5	1.2	2							2							
5 2 2	14.2	5						1	3	1						
5 2 3	61.5	41						17	23	1						
5 2 4	12.3	11							11							
5 2 5	8.9	20							16	3	1					
5 3 2	13.9	0														
5 3 3	111.3	40					1	20	16	3						
5 3 4	66.2	42						0	31	3						
5 3 5	116.1	149				2	4	22	99	10	4					
5 4 1	3.6	13						1	10	1	1					
5 4 3	29.9	5						1	4							
5 4 4	26.7	11						2	5	1	3					
5 4 5	102.1	117			1	4		22	76	7	1	1				
5 4 6	6.7	8							3	3	1	1				
5 5 1	5.5	0														
5 5 4	8.0	4						1	2	1						
5 5 5	164.5	94				3	5	0	32	3	3					
5 5 6	105.5	3					1		1	1						
5 6 3	2.0	0														
5 6 4	17.2	2							1	1						
5 6 5	406.4	49				1	2	9	29	5	3					
5 7 1	1.0	0														
5 7 4	187.7	3						1	1	1						
5 7 5	1001.7	14						9	24		1					
5 8 4	79.5	0														
5 8 5	1992.4	13				1	1	4	23	3						
5 9 4	5159.1	50			1	1	4	12	20	2	2					
5 9 5	8447.2	66				1	11	13	25	13	3					
5 10 3	131.7	0														
5 10 4	19911.1	190			3	5	25	49	77	20	9	2				
5 10 5	142.0	0														
6 1 2	52.1	0						1	7							
6 1 3	93.1	20						7	19	2						
6 1 4	8.9	13						1	9	3						
6 1 5	1.6	4							4							
6 2 2	4.5	0														
6 2 3	72.0	40					1	12	24	2	1					
6 2 4	27.2	34					1	4	21	0						
6 2 5	19.0	29							22	6	1					
6 2 6	1.0	2							1	1						
6 3 2	1.9	0														
6 3 3	94.5	13					1	3	7	1	1					
6 3 4	68.8	36						3	29	4						
6 3 5	189.4	165					3	15	131	13	3					
6 4 2	1.7	4							3	1						
6 4 3	78.0	0														
6 4 4	27.2	6						1	5							
6 4 5	352.3	64						9	49	6						
6 4 6	1.0	1							1							
6 5 4	19.7	1							1							
6 5 5	401.2	6				1		1	4							
6 5 6	1.0	0														
6 6 4	5.5	0														
6 6 5	490.8	15						3	11	1						
6 7 4	6.5	0														
6 7 5	519.1	17				1			11	5						
6 8 4	8.5	0														
6 8 5	987.9	25					3	11	11							
6 9 4	505.4	11						1	0	2						
6 9 5	3563.5	94			2	2	4	15	31	2						
6 10 4	1731.5	3				1		7	2							
6 10 5	35.0	0														
TOTAL	114181.6	4392	0	0	17	45	143	761	2795	497	119	12	2	1	0	0



TABLE B22  
 DISTRIBUTION OF AIRCRAFT LOAD FACTORS  
 PER THE  
 TRAVIS AIR FORCE BASE  
 LOGISTICS, LONG RANGE MISSION  
 DATA SAMPLE

U-NN-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	1.2	1.3	1.4	1.5	1.6	1.8	2.0	2.5	3.0
2 1 2	2.1	0															
2 2 2	7.9	1															
2 2 3	1.5	0							1								
2 2 4	0.5	1															
2 3 2	1.0	0															
2 3 3	0.5	0															
2 3 4	0.0	3															
2 4 4	3.5	0															
2 4 5	3.5	0															
2 5 4	0.5	0															
2 5 5	0.5	2															
2 6 5	2.0	0						1	1								
2 7 5	2.0	0															
2 8 5	2.0	1															
2 9 4	1.0	0															
2 9 5	1.0	0															
2 10 4	1.0	0															
3 1 2	72.5	3						2	1								
3 1 3	2.0	0															
3 2 2	100.0	0															
3 2 3	35.0	10						3	0	1							
3 2 4	17.3	1															
3 3 2	47.5	2															
3 3 3	50.5	20						7	12	1							
3 3 4	40.2	21						1	17	3							
3 3 5	10.4	0															
3 4 2	4.0	0															
3 4 3	23.4	1						1									
3 4 4	07.9	4						1	5								
3 4 5	59.3	1							1								
3 5 2	1.5	0															
3 5 3	5.0	0															
3 5 4	22.5	3							3								
3 5 5	90.1	4						2	1	1							
3 6 5	1.0	1							1								
3 6 2	2.0	0															
3 6 1	9.2	6							5	1							
3 6 4	9.5	1						1									
3 6 5	102.4	2							2								
3 7 3	3.0	0															
3 7 4	9.0	0															
3 7 5	110.4	1							1								
3 8 3	4.2	0															
3 8 4	10.0	0															
3 8 5	91.0	3						1	1	1							
3 9 4	604.5	4						1	3								
3 9 5	133.0	19			1		1	1	14	2							
3 10 4	3770.0	14					2	3	0	1							
4 9 4	841.2	3						3									
4 9 5	474.0	1							1								
4 10 3	23.0	0															
4 10 4	7304.0	20				1	2	9	9	2		1					
5 6 5	0.5	0															
5 7 5	0.5	0															
5 8 5	20.0	0															
5 9 4	1343.0	14						6	4	4							
5 9 5	1500.0	10						7	7	1							
5 10 4	5071.0	67				1	2	21	31	9	2	1					
5 10 5	30.0	1							1								
6 1 2	12.4	1						1	4								
6 1 3	25.3	12						1	11								
6 1 4	1.5	0															
6 1 5	0.1	0															
6 2 3	17.0	6						5	1								
6 2 4	5.5	7							6	1							
6 2 5	1.7	17							12	1	4						
6 3 3	0.9	4						3	1								
6 3 4	10.7	4						1	3								
6 3 5	99.7	44						0	31	5							
6 3 6	0.2	0															
6 4 4	2.2	0															
6 4 5	90.4	40						4	30	3	1						
6 4 6	0.5	0															
6 5 5	107.0	9							9								
6 5 6	1.0	0															
6 6 4	1.0	0															
6 6 5	159.0	5						1	4								
6 7 5	100.2	3						1	2								
6 8 4	1.5	0															
6 8 5	201.4	4						2	2								
6 9 4	270.3	10					3	0	2	3							
6 9 5	724.5	20				1	1	10	11	5							
6 10 4	674.0	3							2								
6 10 5	29.0	0															
TOTAL	29059.4	474	0	0	2	3	12	112	200	47	7	2	0	0	0	0	0



TABLE B33  
DISTRIBUTION OF PARADEUR LOAD FACTORS  
FOR THE  
TRAVIS AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

W-M-A BLOCK	BLOCK TYPE (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD 0.0	FACTOR 1.2	DISTRIBUTION (%)	1.3	1.4	1.6	1.8	2.0	2.5	3.0
2 1 1	1.9	0															
2 1 2	150.1	89					2	9	71	7							
2 1 3	15.3	19						4	13	2							
2 1 4	C.2	0															
2 2 2	239.5	94						4	48	2							
2 2 3	78.5	64					1	12	41	9	1						
2 2 4	2.3	4							4								
2 3 2	97.7	27					1	7	17	2							
2 3 3	162.5	94					2	20	56	13	3						
2 3 4	108.8	58					1	6	36	12	3						
2 3 5	15.1	18							15	3							
2 4 2	1.7	0															
2 4 3	2.1	5						5									
2 4 4	9.2	12					1	2	5	3	1						
2 4 5	2.5	1								1							
2 4 6	0.2	0															
2 5 3	0.5	1						1									
2 5 4	P.1	21						8	9	3	1						
2 5 5	2.8	0															
2 6 3	1.5	4						2	2								
2 6 4	10.4	14				2		10	2								
2 6 5	3.9	4							4								
2 7 3	15.2	6							2	4							
2 7 4	30.3	28					1	3	20	4							
2 7 5	1.7	3						2	1								
3 1 1	4.5	0															
3 1 2	639.4	416					4	67	284	55	6						
3 1 3	144.3	162			1		3	28	105	24	1						
3 1 4	21.6	47					2	9	25	11							
3 1 5	11.3	13						4	8	1							
3 2 2	934.9	234					3	41	163	26	1						
3 2 3	489.4	474			1	2	12	63	322	66	7	1					
3 2 4	59.4	96					2	17	64	13	3						
3 2 5	9.2	20						1	14	4	1						
3 3 2	396.8	134						26	101	5	2						
3 3 3	1254.7	640					12	113	459	69	7						
3 3 4	993.0	721					2	7	59	508	124	21					
3 3 5	228.1	318			1	2	5	56	175	60	17	1			1		
3 3 6	1.3	1							1								
3 4 2	7.5	1							1								
3 4 3	142.1	58						4	51	3							
3 4 4	475.2	239					1	5	54	160	32	7					
3 4 5	260.3	229			1	2	9	53	126	29	8	1					
3 4 6	3.0	3															
3 5 2	37.4	1							1								
3 5 3	86.2	22					1	6	12	3							
3 5 4	356.6	426				2	6	35	196	75	77	15					
3 5 5	318.5	261				1	10	35	111	39	52	10		2	1		
3 5 6	2.7	10						1	4		1	1		1	2		
3 6 2	16.4	0															
3 6 3	129.3	60			1	1	5	6	42	3	1	1					
3 6 4	501.8	585			1	5	22	91	287	93	63	21		2			
3 6 5	298.6	127			1		10	56	152	65	37	7				1	
3 6 6	P.6	2							1								
3 7 2	0.3	0															
3 7 3	297.9	145					2	1	16	104	15	6	1				
3 7 4	504.3	373					1	8	42	209	68	40	5				
3 7 5	136.3	89						4	14	51	17	2	1				
3 8 1	1.2	3						1	1	1							
3 8 4	4.0	1							1								
3 8 5	15.3	7						1	1								
3 9 4	5.6	7					1	1	1								
3 9 5	126.8	2						1	1								
3 10 1	21.4	0															
3 10 4	58.0	12						4	6	1	1						
4 1 2	45.5	80					1	3	62	14							
4 1 3	21.5	35					1	10	19	4	1						
4 1 4	2.5	4				1		2	1								
4 1 5	C.2	0															
4 2 2	28.8	9							8		1						
4 2 3	43.1	49						11	29	8	1						
4 2 4	12.0	15					1	1	12	1							
4 2 5	10.5	11							8	2	1						
4 3 2	11.2	3							3								
4 3 3	73.7	40					1	7	24	7	1						
4 3 4	139.6	69						14	47	6	2						
4 3 5	118.5	160			1	4	3	25	96	23	8						
4 3 6	2.1	11				2			7	2							
4 4 3	10.5	2								1	1						
4 4 4	105.3	49					1	3	40	5							
4 4 5	100.8	55			1		5	10	34	3	2						
4 4 6	1.8	4				2	1	1									
4 5 3	2.0	0															
4 5 4	17.5	6							6								
4 5 5	41.2	14						2	11	1							
4 6 2	13.5	0															
4 6 3	12.0	2							2								
4 6 4	12.0	20						2	7	3	8						
4 6 5	40.2	52					2	4	19	10	13						
4 7 3	9.5	1							1								
4 7 4	9.5	10							10								
4 7 5	33.8	5						3	2								
4 8 5	5.6	0															
4 9 4	1.8	0															
4 9 5	1.6	0															
4 10 4	9.0	0															
TOTAL	10002.2	7370	0	0	9	32	158	1090	436	1066	411	65	5	6	0	0	0



TABLE B24  
DISTRIBUTION OF MANEUVER LOAD FACTORS  
FOR THE  
TRAVIS AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

M-W-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)															
			-0.5	0.0	0.5	0.6	0.7	0.0	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0		
3 1 2	14.4	4							3	1								
3 1 3	5.4	5					1	2	2									
3 2 2	16.5	10						3	13	2								
3 2 1	26.1	15						1	11	3								
3 2 4	3.2	0																
3 2 5	1.0	0																
3 3 2	10.0	3						1	2									
3 3 3	30.0	15						3	11	1								
3 3 4	5.4	2						1	1									
3 3 5	4.4	5							4			1						
3 4 1	12.0	4						1	3									
3 4 4	10.4	7						1	5	1								
3 4 5	3.7	1																
3 5 2	1.0	0																
3 5 3	10.0	0																
3 5 4	10.1	10						3	6	1								
3 5 5	15.3	9						1	0									
3 5 6	1.4	1							1									
3 6 4	5.1	5						1	3	1								
3 6 8	24.4	6						4	1	1								
3 6 9	2.0	0																
3 7 2	2.0	0																
3 7 3	2.2	0																
3 7 4	17.5	25					1	0	12	2	2							
3 7 5	23.9	15						1	13	1								
3 8 4	1.3	1																
3 8 5	2.5	2							2									
3 9 4	2.2	2					1	1										
3 9 5	1.0	0																
3 10 3	0.0	2						2										
3 10 4	11.2	6						4	2									
4 1 2	1.9	3																
4 1 3	0.2	1						1	7	1								
4 2 3	1.3	0																
4 2 4	0.3	0																
4 2 5	0.3	0																
4 3 3	0.7	0																
4 3 4	1.0	0																
4 3 5	1.2	4							3	1								
4 4 3	2.7	1							1									
4 5 3	3.2	2							2									
4 6 6	2.4	2							2									
4 7 4	1.0	0																
4 7 5	12.1	7						2	5									
TOTAL	321.7	180	0	0	0	0	3	41	119	17	3	0	0	0	0	0	0	



TABLE B25  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
LOGISTICS, MEDICAL RANGE MISSION  
DATA SAMPLE

WIND- DIRECTION BLOCK	WIND- SPEED BLOCK	WIND- TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR DISTRIBUTION (6)	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
									0.8	0.9								
2	1	7	3.6	22						9	13							
2	2	2	4.0	21						6	13	2						
2	2	3	2.0	11						7	6							
2	2	4	1.5	21					1	1	11	7	1					
2	3	4	1.5	3						1	2							
2	3	5	0.5	0														
2	4	4	4.0	0														
2	4	5	5.7	0														
2	5	5	4.5	0														
2	6	5	2.8	0														
2	7	5	4.5	0														
2	8	4	1.0	0														
2	8	5	2.0	0														
2	9	4	10.0	0														
3	1	2	95.7	110						47	69	2						
3	1	3	40.5	50						21	30	2	1					
3	1	4	11.9	03						1	20	44	6					
3	2	2	119.0	274						1	9	84	129	9				
3	2	3	54.1	124						1	9	45	50	10	1			
3	2	4	29.1	210						2	10	71	90	23	4	2		
3	2	5	1.4	13								2	5	4	1			
3	3	2	29.5	10								17	12	1				
3	3	3	56.8	57						1	31	25	1					
3	3	4	74.9	336						14	117	154	20	10	4			
3	3	5	16.3	27						4	6	15	2					
3	4	1	27.1	60						6	30	26	6					
3	4	4	77.0	235						10	83	113	22	3	1			
3	4	5	55.0	196						1	2	19	72	75	20	1	4	
3	4	6	1.0	0														
3	5	4	20.1	106						6	39	46	11		2			
3	5	5	117.9	267						1	9	109	123	20	4			
3	5	6	3.0	9								4	5					
3	6	1	1.0	0														
3	6	4	27.4	66								20	32	6				
3	6	5	269.1	135						7	43	77	6	2				
3	6	6	4.0	0								2	5	1	1			
3	7	3	0.5	0														
3	7	4	24.7	14								1	5	7				
3	7	5	170.6	203								22	93	114	37	9	3	
3	8	4	27.7	10								1	17	11	1			
3	8	5	207.3	249								1	10	97	146	19	5	2
3	9	3	2.0	0														
3	9	4	1172.4	706								1	2	23	297	432	27	3
3	9	5	593.7	229								2	5	90	110	4	1	1
3	10	3	1.6	0														
3	10	4	1594.1	1400								4	3	13	81	543	657	85
4	1	2	23.4	25														
4	1	3	2.7	1														
4	1	4	0.2	0														
4	1	5	6.2	0														
4	2	2	42.1	40								21	25	2				
4	2	3	36.0	73								20	44	1				
4	2	4	7.7	3								2	1					
4	2	5	0.7	0														
4	3	2	11.7	1														
4	3	3	40.0	41								1						
4	3	4	47.6	102								16	25					
4	3	5	13.7	17								3	11	11	6	3		
4	4	1	7.4	1								5	10	2				
4	4	4	47.2	97								2	9	34	34	13		
4	4	5	56.0	16										17	16	3		
4	4	6	0.7	0														
4	5	4	13.7	20										8	11	1		
4	5	5	60.2	64								1	3	20	33	5	2	
4	6	4	11.8	1														
4	6	5	155.5	77										3	23	50	1	
4	7	4	5.5	21										1	10	8	2	
4	7	5	200.7	100										1	42	59	3	2
4	8	4	0.0	21										1	6	13	1	
4	8	5	524.0	680										2	4	15	202	419
4	8	6	6291.0	1972										2	15	739	1142	91
4	9	4	1194.1	260											4	100	150	4
4	10	4	7030.4	1211											2	16	459	700
4	10	5	3.0	0														
5	1	2	20.0	20										5	23			
5	1	3	13.7	25										2	10	13		
5	1	4	1.1	1														
5	2	2	1.4	2														
5	2	3	10.5	7														
5	2	4	3.0	11														
5	2	5	1.0	1														
5	3	3	15.2	1														
5	3	4	22.7	30														
5	3	5	15.4	114														
5	4	6	0.1	0														
5	4	7	2.0	3														
5	4	8	105.4	90														
5	4	9	1.0	0														
5	5	4	0.5	0														
5	5	5	155.3	60														
5	5	6	221.3	90														
5	7	4	1.0	0														
5	7	5	340.2	32														
5	7	6	1.0	0														
5	8	4	0.0	3														
5	8	5	593.7	405														
5	9	4	6460.4	2290														
5	9	5	1637.1	367														
5	10	3	5.4	0														
5	10	4	4022.1	1414														
5	10	5	3.0	0														



TABLE B28 continued  
 DISTRIBUTION OF GUST LOAD FACTORS  
 FOR THE  
 CHARLESTON AIR FORCE BASE  
 LOGISTICS, MEDICAL AND RESEARCH  
 DATA SAMPLE

WIND-4 BLOCK	GUST TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (6)													
			-0.9	0.0	0.9	0.4	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0
0 1 2	10.0	24							0	19	1					
0 1 3	10.0	00						2	21	44	2					
0 1 4	3.0	4							2	2						
0 1 5	2.1	4							2	4						
0 2 2	1.0	0														
0 2 3	25.2	47						1	21	21	4					
0 2 4	6.0	44						1	14	27	3					
0 2 5	9.0	21						1	7	13						
0 3 3	8.0	14							4	10						
0 3 4	33.7	90						4	32	31	6					
0 3 5	51.3	143						6	51	70	16					
0 3 6	2.2	0														
0 4 4	4.1	22						2	3	0	7	2				
0 4 5	132.0	214				2	6	0	65	114	15	3	1			
0 4 6	1.5	1								1						
0 5 4	21.7	2								2						
0 5 5	137.0	100					2	12	63	93	13	5				
0 5 6	3.2	0														
0 6 4	4.5	2							1	1						
0 6 5	158.6	131					3	4	44	75	5					
0 6 6	2.0	0														
0 7 4	3.0	0														
0 7 5	140.3	80						2	30	48	2	1				
0 8 4	7.0	0														
0 8 5	197.2	93					2	3	27	61	1	1				
0 9 4	656.5	111					1	3	33	71	2	1				
0 9 5	324.8	340				1	2	3	16	127	190	25	4	3		
0 10 4	267.5	39							33	26						
TOTAL	36791.5	17127	0	0	12	23	102	351	6167	9255	829	144	40	4	0	0



TABLE 236  
DISTRIBUTION OF GUST LOAD FACTORS  
PER THE  
CHARLOTTE AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

W-M-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR 0.8	0.9	DISTRIBUTION 101 1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
2 1 2	7.0	70						7	32	33	6							
2 2 2	40.9	391						19	100	147	9							
2 2 3	0.4	101						6	40	43	6							
2 3 2	15.9	100					1	9	90	76	6							
2 3 3	12.6	140					1	10	50	60	4	1						
3 1 1	1.2	0							2	4	2							
3 1 2	33.9	222						4	60	124	6							
3 1 3	3.4	21						2	3	14								
3 2 2	60.4	309						20	159	104	9	1						
3 2 3	33.3	199						2	40	86	2	1						
3 2 4	5.0	40						1	10	24	3							
3 3 2	24.5	190						0	71	66	5							
3 3 3	25.9	245						20	102	100	11	3	1					
3 3 4	17.0	104					3	10	70	87	11	2	1					
3 3 5	1.4	32						3	12	15	2							
3 4 3	2.7	5							4	1								
3 4 4	8.2	27						2	16	7		2						
3 4 5	13.0	95					1	9	26	37	11	4	2					
3 4 6	1.0	4						1	1		2							
3 5 4	1.0	0																
3 5 5	4.0	11							0	3								
3 6 4	1.0	C																
3 6 5	3.5	4							3	1								
3 7 4	0.5	4							2	2								
3 7 5	0.5	22							0	9								
3 8 4	0.3	1					1	4	0									
3 8 5	23.0	72						5	30	27	3	1						
3 9 4	7.5	2						1	1									
3 9 5	1.0	0																
3 10 4	247.0	40						6	26	11	3	2						
4 1 2	C.5	1							1	1								
4 1 3	0.5	1							1	1								
4 2 2	0.6	2							1	1								
4 2 3	5.2	0						1	3	4								
4 3 4	1.2	1									1							
4 3 5	0.0	1							1									
4 4 4	1.2	0																
4 4 5	2.0	0																
4 5 4	1.0	0																
4 5 5	2.0	0																
4 6 3	6.0	0																
4 6 4	9.8	0							3	5								
4 6 5	4.0	2								2								
4 7 5	4.0	0																
4 9 4	34.0	5							5									
4 10 4	390.0	91							26	63	2							
5 1 2	1.1	10							6	4								
5 2 3	1.5	0							4	4								
5 3 3	1.2	2							2									
5 3 4	1.0	5						1	1	3								
5 3 5	1.4	7							3	4								
5 4 4	1.6	0																
5 4 5	2.5	4								4								
5 5 5	5.0	5							4	1								
5 6 4	4.5	10							6	4								
5 7 5	7.0	3								2		1						
5 8 5	0.0	5							2	3								
5 9 4	55.0	473				1	5	44	214	170	27	4						
5 9 5	4.0	15							7	0								
5 10 4	204.0	332						1	130	100	7							
TOTAL	1400.2	3566	0	0	0	2	16	212	1540	1634	197	21	4	0	0	0	0	0



TABLE B27  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
MISCELLANEOUS MISSION  
DATA SAMPLE

U-W-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR DISTRIBUTION (G)											
								0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0	
2 1 2	9.7	15					1	1	6	9	2								
2 1 3	2.2	1								1									
2 1 4	1.6	7							4	3									
2 1 5	1.2	1								1									
2 2 2	5.0	3							1	2									
2 2 3	9.0	8																	
2 2 4	36.0	31							10	20	1								
2 2 5	2.6	8																	
2 3 1	7.0	1																	
2 3 4	9.0	20					1	3	3	15	4								
2 3 5	18.2	44							20	21	2	1							
2 3 6	1.1	6							1	4	1								
3 1 2	2.0	8																	
3 1 4	22.2	144							2	37	94	11							
3 1 5	26.7	219							11	64	100	20	5						
3 1 6	0.5	3							2	1	1	1							
3 1 7	0.2	5								2	1	1							
3 2 2	44.0	9								3	1								
3 2 3	32.6	2								2									
3 2 4	44.0	115							2	41	62	8	1	1					
3 2 5	48.0	95					1	2	27	61	4								
3 2 6	2.5	8																	
3 3 2	6.5	8																	
3 3 3	12.3	4							1	2									
3 3 4	21.7	68					2		20	30	5	1	1	1					
3 3 5	20.1	23						2	9	9	3								
3 3 6	2.3	8																	
3 4 4	18.6	15					1	1	6	2	3	1	1						
3 4 5	52.7	86						5	36	42	3								
3 4 6	0.5	8																	
3 5 5	1.0	32					1	1	13	9	5	3							
3 6 5	2.5	8							6	2									
4 1 2	0.6	7							1	2	4								
4 1 3	0.9	12					1	3	2	6									
4 1 4	0.7	5						1	2		2								
4 1 5	0.3	5							2	3									
4 2 4	8.5	2							2										
4 2 5	0.5	6						1		5									
4 3 4	0.1	8																	
4 3 5	3.7	16						2	4	9		1							
4 4 4	2.6	1							1										
4 4 5	15.6	10						1	4	5									
4 4 6	2.0	1								1									
4 5 4	4.5	8																	
4 5 6	3.0	3							2	1									
4 6 5	7.0	8																	
4 7 5	22.0	6						1	2	3									
4 7 6	2.5	8																	
TOTAL	516.8	1090	0	0	0	0	8	42	340	545	76	14	3	2	8	8	8	8	8

TABLE B28  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
CHARLESTON AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

U-W-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	LOAD FACTOR DISTRIBUTION (G)											
								0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0	
3 1 2	6.0	18							7	10	1								
3 1 3	0.2	49						4	9	34	2								
3 1 4	0.3	3							1	2									
3 2 4	0.9	7							2	3	2								
3 2 5	0.1	0																	
3 3 4	2.5	6					1		1	4									
3 3 5	0.5	1																	
3 4 4	2.6	9					1	1	1	5		1							
3 4 5	1.6	12						1	7	4									
3 5 4	2.0	73			1	1	4	4	10	15	10	6	3	1					
3 5 5	1.0	2								2									
3 6 4	0.6	20						3	6	8									
3 6 5	1.9	4							2	2									
3 7 4	3.5	7							4	2	1								
3 7 5	3.5	2								2									
3 8 4	1.0	8																	
3 8 5	7.0	39					1	2	14	10	4								
3 9 4	3.5	1								1									
3 9 5	1.0	8																	
3 10 4	27.5	9							3	6									
TOTAL	81.0	262	0	0	1	3	7	15	78	110	28	7	3	1	8	8	8	8	8



TABLE B19  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
LOGISTICS, MEDIUM RANGE MISSION  
DATA SAMPLE

WIND- BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.3	0.0	0.3	0.6	0.7	LOAD FACTOR DISTRIBUTION (6)										
								0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
2 1 2	10.4	43							17	20								
2 2 2	13.2	0																
2 2 3	3.7	4							4									
2 2 4	1.0	9							4	5								
2 3 2	4.9	1								1								
2 3 3	8.0	1							1									
2 3 4	5.5	3							3									
2 3 5	5.5	2							1	1								
2 4 2	1.7	0																
2 4 3	10.3	3									3							
2 4 4	8.9	10							2	0								
2 4 5	5.5	3							1	2								
2 4 6	1.0	0																
2 5 1	1.0	0																
2 5 4	9.0	94					1	2	17	32	2							
2 5 5	3.0	4						2	2									
2 6 1	0.5	1																
2 6 4	4.8	17											1					
2 6 5	53.5	60							7	10								
2 7 4	5.0	0							19	40	1							
2 7 5	22.5	46							2	5	1							
2 8 4	2.5	6							5	41								
2 8 5	9.0	13						1	7	4								
2 9 4	4.3	12						1	5	3								
2 9 5	14.0	9						1	5	3	3							
2 10 1	1.0	2							1	1								
2 10 4	135.0	110							15	92	3							
3 1 2	76.9	205						1	72	130	2							
3 1 1	27.2	153						4	69	70	7							
3 1 4	7.6	15						1	4	6	4							
3 2 2	173.2	321					2	7	102	202	0							
3 2 3	94.2	167						1	65	89	11							
3 2 4	27.5	196					2	13	67	89	21							
3 2 5	1.0	10						1	3	3	3							
3 3 2	92.2	211						4	79	124	4							
3 3 1	168.0	273						4	101	150	13							
3 3 4	111.4	367					1	9	131	202	23							
3 3 5	55.4	267						17	89	134	22							
3 3 6	1.9	2							1	1								
3 4 2	4.4	11							5	4								
3 4 1	43.3	104					1	2	38	61	2							
3 4 4	122.5	262						11	94	144	9							
3 4 5	145.0	256						7	80	124	10							
3 4 6	7.7	38						2	10	18	2							
3 5 1	1.0	0																
3 5 4	29.6	40							18	20	2							
3 5 5	157.9	289						5	67	127	9							
3 5 6	12.7	52						5	18	23	4							
3 5 7	0.2	0																
3 6 1	1.2	0																
3 6 4	30.8	34					1	2	9	20	1							
3 6 5	734.3	402					2	3	19	124	205	42						
3 6 6	7.7	1																
3 7 4	19.1	15							4	11								
3 7 5	294.7	205							5	87	99	13						
3 7 6	4.5	1							1									
3 8 4	5.0	1																
3 8 5	325.0	270					1	1	7	93	156	10						
3 8 1	0.5	1																
3 9 4	1508.4	453							12	178	250	13						
3 9 5	511.7	324					1	2	19	125	150	14						
3 10 4	2584.5	1667						2	53	672	1059	75						
3 10 5	160.2	319						10	25	94	152	29						
4 1 2	40.7	85							24	57	4							
4 1 1	24.0	113							4	42	57							
4 1 4	2.9	55							1	20	25	5						
4 2 2	32.9	34							1	15	19							
4 2 3	44.9	68							2	12	31	3						
4 2 4	4.5	36								9	23	3						
4 3 2	31.4	12								5	7							
4 3 1	84.8	74								24	46	2						
4 3 4	70.1	147						1	10	45	75	10						
4 3 5	53.6	285						4	25	95	122	31						
4 3 6	9.6	52							6	15	18	8						
4 4 1	15.9	21							2	10	6	3						
4 4 4	39.6	120							4	49	65	2						
4 4 5	91.6	150							1	47	94	7						
4 4 6	5.9	6								2	4							
4 5 3	4.5	4								2	2							
4 5 4	25.0	34							5	14	14							
4 5 5	117.0	246						4	10	100	183	28						
4 5 6	4.1	5								2	2	1						
4 6 1	5.0	1								1								
4 6 4	22.8	27							1	9	16							
4 6 5	140.1	72							2	33	55	2						
4 7 2	0.5	0																
4 7 4	8.9	3								3								
4 7 5	245.9	271							13	77	197	21						
4 7 6	1.0	43							1	16	21	5						
4 8 4	20.7	13								6	7							
4 8 5	820.4	568								30	177	290	39					
4 9 4	6200.4	2056								55	623	1104	60					
4 9 5	2310.3	1663								52	585	930	76					
4 10 1	0.7	0																
4 10 4	9840.0	3567								110	1304	1760	137					
4 10 5	216.5	40								4	9	21	5					
5 1 2	20.0	41																
5 1 1	21.5	39							1	13	25							
5 1 4	2.4	7								2	5							
5 1 5	1.1	4								2	2							



TABLE B29 continued  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
COVER AIR FORCE BASE  
LOGISTICS, MEDIUM RANGE MISSION  
DATA SAMPLE

U-10-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.8	2.0	2.5	3.0
5 2 2	2.3	13							1	12										
5 2 3	20.2	33						3	10	19			1							
5 2 4	5.9	40						1	12	24		3								
5 2 5	3.9	12							4	5		1	2							
5 3 2	1.0	6							2	4										
5 3 3	10.9	31						2	6	19		3	1							
5 3 4	29.4	70						4	20	34		11	1							
5 3 5	61.0	100					2	6	35	103		11	3							
5 3 6	10.3	43							15	27		3								
5 4 3	1.0	1							1											
5 4 4	3.7	0																		
5 4 5	110.3	191					3	0	52	110		14	3	1						
5 4 6	4.0	7							2	5										
5 5 4	1.7	0																		
5 5 5	145.2	234							11	77	120	15	3							
5 5 6	2.6	11								5	6									
5 6 3	0.5	0																		
5 6 4	5.8	1								1										
5 6 5	195.2	237					4	20	60	110		21		2						
5 6 6	0.5	23							9	13			1							
5 7 4	1.5	1								1										
5 7 5	303.5	63					1	1	29	92										
5 7 6	27.0	3								3										
5 8 4	0.7	1								1										
5 8 5	694.9	202						4	97	176		5								
5 9 3	1.0	0																		
5 9 4	5312.2	1400					3	3	40	461	841	49	6	3						
5 9 5	1030.4	722					5	10	24	210	409	46	6	4						
5 10 3	10.5	1								1										
5 10 4	6101.9	3065					2	11	65	1402	2242	120	13	2						
5 10 5	57.7	15								5	10									
6 1 2	12.3	30								3	33		1							
6 1 3	34.4	50								10	37		5							
6 1 4	2.9	6								1	5									
6 1 5	0.7	1									1									
6 2 2	0.5	0																		
6 2 3	20.0	39						1	13	25										
6 2 4	0.9	30							17	20		1								
6 2 5	0.0	49						1	14	19		7	5	3						
6 2 6	0.5	20					1	3	4	3		7	2							
6 3 2	1.0	3							1	2										
6 3 3	14.4	10							0	10										
6 3 4	21.1	65						1	16	40		0								
6 3 5	59.0	316					1	1	4	27	60	137	51	5	2					
6 3 6	11.0	30							2	9	19	6	2							
6 4 4	3.7	12								2	10									
6 4 5	112.2	195					1	2	11	79	65	17								
6 4 6	4.0	6								5	1									
6 5 4	2.0	2								2										
6 5 5	130.0	104								34	63	7								
6 5 6	3.0	0																		
6 6 4	0.5	0																		
6 6 5	142.0	60								19	30	3								
6 6 6	2.0	0																		
6 7 4	4.3	1																		
6 7 5	107.1	60							1	13	71	3								
6 7 6	0.7	0																		
6 8 4	0.0	13																		
6 8 5	361.1	70							2	3	10	2								
6 9 1	671.6	505							2	18	54	5								
6 9 5	317.5	160					1	11	104	346	50	1								
6 10 5	768.7	402							2	52	103	2		1						
6 10 6									5	197	260	10	2							
TOTAL	46002.3	27201	0	1	5	24	114	640	9085	15070	1319	164	40	3	0	0	0	0	0	0



TABLE B30  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
LOGISTICS, LONG RANGE MISSION  
DATA SAMPLE

W-W-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)															
			-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
2 10 3	94.9	0																
3 1 3	2.2	15							6	9								
3 2 3	4.5	9							5	4								
3 3 4	0.5	0																
3 3 4	2.0	0																
3 4 4	4.0	0																
3 5 3	1.0	0																
3 5 4	1.0	0																
3 5 5	3.0	0																
3 6 5	3.0	0																
3 7 5	2.0	16							9	7								
3 8 5	2.0	3							2	1								
3 9 4	16.0	10							6	12								
3 10 3	174.0	0																
3 10 4	108.0	32							17	14	1							
4 9 4	161.0	17							5	12								
4 10 3	49.0	10						1	6	11								
4 10 4	232.0	106							33	72	1							
5 9 4	208.0	4							1	7								
5 10 4	238.0	493					1	19	201	255	16	1						
6 1 3	1.6	1							1									
6 2 4	0.4	0																
6 2 5	0.5	0																
6 3 5	1.0	3								3								
6 4 5	2.5	0																
6 5 5	3.0	8					1	1	2	3		1						
6 6 5	6.0	0																
6 7 5	6.0	6								6								
6 8 4	2.0	0																
6 8 5	9.0	6							2	4								
6 9 4	92.0	177				2	1	20	60	60	29	5						
6 9 5	1.0	3								3								
TOTAL	1389.1	939	0	0	0	2	3	41	354	493	47	7	0	0	0	0	0	0



TABLE B31  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

M-W-A BLOCK	BLOCK TYPE (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.5	3.0
2 1 1	C-1	0																				
2 1 2	104.6	524					1	8	101	306	27	1										
2 1 3	29.2	147					1	9	46	70	17	2		2								
2 1 4	8.1	4						2	2	3	1											
2 2 2	119.1	398						9	148	217	22	2										
2 2 3	113.2	634						26	212	325	56	9		1								
2 2 4	74.1	193						17	56	60	32	10	7									
2 2 5	C-6	11					1	1	2	1	4	1	1									
2 3 2	97.7	169						3	60	101	4	1										
2 3 3	95.4	290						17	133	167	29	3										
2 3 4	32.8	463					1	5	16	44	154	164	71	18	8	2						
2 3 5	2.7	49						2	11	23	8	4	1									
2 4 2	C-7	1							1													
2 4 3	9.3	10							6	4												
2 4 5	2.0	45						4	17	10	7	4	1									
2 5 3	12.3	2																				
2 5 5	1.0	1																				
2 5 6	C-5	0																				
2 6 3	1.0	0																				
2 6 5	2.5	0																				
2 7 5	5.5	2									2											
2 8 5	2.0	0																				
2 9 5	1.0	2							1	1												
2 10 4	86.5	1								1												
2 10 5	1.0	0																				
3 1 1	C-3	0																				
3 1 2	395.5	1584					1	20	300	965	95	2	1									
3 1 3	105.9	588					2	20	236	271	54	5										
3 1 4	38.7	614						74	110	129	138	39	26	4	2							
3 1 5	75.1	1461						159	336	387	242	124	64	12								
3 1 6	6.0	60							27	32	1											
3 2 2	475.1	1486					3	54	552	783	87	7										
3 2 3	822.0	2974					2	25	122	1408	1424	250	36	3								
3 2 4	94.4	1246						154	291	312	211	103	47	11								
3 2 5	42.4	1031						62	122	247	215	178	63	5	2							
3 3 2	92.4	255						4	90	149	12											
3 3 3	492.5	1107					5	46	383	552	103	14	3	1								
3 3 4	278.0	1586						119	526	681	191	36	13									
3 3 5	116.7	826					1	8	46	227	419	89	23	9								
3 3 6	7.1	2							2													
3 4 2	2.0	2							2													
3 4 3	14.0	12						2	6	4												
3 4 4	67.2	89					1	2	5	30	42	5	2	2								
3 4 5	72.5	240					4	2	18	73	117	17	8	1								
3 4 6	6.0	27							2	9	13	3										
3 5 3	61.2	25							1	9	14	1										
3 5 4	292.7	259						1	3	82	156	14	2	1								
3 5 5	164.0	205							2	70	127	6										
3 5 6	4.0	6							2	4												
3 6 2	7.0	0																				
3 6 3	33.4	11					2		5	4												
3 6 4	90.4	107					2	9	36	50	8	2										
3 6 5	116.2	164					3	10	52	74	15	7	3									
3 6 6	C-3	0																				
3 7 2	1.3	0																				
3 7 3	15.0	26							3	19	4											
3 7 4	39.0	14							7	7												
3 7 5	150.9	83					1	3	24	45	6	2	1									
3 8 2	27.0	4							1	3												
3 8 3	8.0	9							1	7	1											
3 8 4	2.0	2							2													
3 8 5	44.5	13							5	8												
3 9 2	8.0	0																				
3 9 3	37.5	0																				
3 9 4	12.0	13								13												
3 9 5	11.5	40						1	20	34	3	2										
3 10 3	119.5	0																				
3 10 4	844.7	264					1	5	110	142	6											
3 10 5	2.5	2							1	1												
4 1 2	41.9	165						3	57	86	16	1										
4 1 3	21.2	77						2	30	41	4											
4 1 4	1.4	12							2	7	1											
4 1 5	0.5	18					3	3	1	8	1	2										
4 2 2	34.1	82						2	37	37	6											
4 2 3	84.6	173					3	5	70	85	9	1										
4 2 4	3.1	13							3	9	1											
4 2 5	10.7	95					1	5	59	24	4		1									
4 3 2	7.3	9							5	4												
4 3 3	83.0	116						4	37	68	5	1										
4 3 4	40.5	81						5	30	37	1											
4 3 5	60.7	265					5	20	98	104	26	9	3									
4 3 6	1.2	11						2	4	5												
4 4 4	7.1	8							3	5												
4 4 5	33.9	80					2	4	36	41	3											
4 4 6	1.9	2								2												
4 5 3	1.0	0																				
4 5 4	3.4	7							4	3												
4 5 5	31.5	38							18	16	4											
4 6 5	13.8	2							2													
4 7 3	2.0	4							1	3												
4 7 4	8.0	22							2													
4 7 5	18.7	107						1	10	11												
4 8 5	187.0	107						2	61	42	2											
4 9 4	13.5	3								3												
4 9 5	487.1	175					1	2	97	110	5											
4 10 4	1248.0	118							49	67	2											
4 10 5	6.0	0																				
5 1 2	9.4	37							8	27	2											
5 1 3	13.5	61						1	25	32	1	2										
5 2 5	13.5	27							12	16	1											



TABLE B31 continued  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

U-W-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)													
			-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0
5 2 4	0.4	8							2	6						
5 3 3	1.6	0														
5 3 4	1.6	6							1	5						
5 3 5	27.6	59							13	45	1					
5 3 6	3.5	14							4	10						
5 4 4	1.5	0														
5 4 5	23.4	0							7	2						
5 4 6	0.2	0														
5 5 5	23.0	14							5	0	1					
5 6 5	24.0	14							3	9		1				
5 7 1	24.3	70							34	33	3					
5 8 4	130.3	140						1	73	72	3					
5 9 4	100.9	97						1	33	35	6					
5 9 5	974.5	773				2	3	27	305	309	41	7	1			
5 10 4	500.4	43						2	26	64	1					
5 10 5	1.0	0														
TOTAL	9959.5	22995	0	0	57	134	402	1241	7512	10160	2177	602	263	35	4	0

TABLE B32  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
DOVER AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

U-W-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)													
			-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0
3 1 2	10.3	20							11	16	1					
3 1 3	4.2	19							5	14						
3 2 2	12.0	15							5	10						
3 2 3	33.0	33							10	23						
3 2 4	2.3	0							3	6						
3 3 3	14.1	10							0	0	2					
3 3 4	9.9	13					1		1	10		1				
3 3 5	2.0	15						1	0	2	3	1				
3 4 3	6.0	15						2	7	4						
3 4 4	1.0	1								1						
3 4 5	3.7	34					1		4	22	20	5	2			
3 5 3	9.2	1									1					
3 5 4	12.5	4						1	1	2						
3 5 5	7.4	3							1	4						
3 6 3	0.0	0														
3 6 4	37.7	3								2		1				
3 6 5	13.0	1								1						
3 7 4	19.0	1								1						
3 7 5	0.0	2														
3 8 5	21.0	34							11	23						
3 9 4	2.3	13							3	9	1					
3 9 5	12.5	25						1	6	10						
3 10 4	3.0	53							24	20	1					
4 1 2	1.5	3							1	2						
4 1 3	1.0	2								2						
4 2 3	0.9	1								1						
4 2 4	0.3	0														
4 3 3	1.2	0														
4 3 4	3.1	2						1		1						
4 3 5	4.0	0							1							
4 3 6	0.2	0														
4 4 5	3.0	0						1	4	3						
4 4 6	0.3	1														
4 5 5	4.0	0														
4 6 1	1.5	0														
TOTAL	265.4	306	0	0	0	0	2	11	122	293	13	9	0	0	0	0



TABLE 203  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TINIAN AIR FORCE BASE  
LOGISTICS, REPAIR AND MAINTENANCE  
DATA SAMPLE

U-NN-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)												
			-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5
2	1.2	0													
2	2.2	0													
2	3.2	0													
2	4.2	10													
2	5.2	20													
2	6.2	3													
2	7.2	1													
2	8.2	7													
2	9.2	0													
2	10.2	5													
2	11.2	5													
2	12.2	5													
2	13.2	14													
2	14.2	0													
2	15.2	12													
2	16.2	37													
2	17.2	0													
2	18.2	97													
2	19.2	0													
2	20.2	0													
2	21.2	4													
2	22.2	29													
2	23.2	0													
2	24.2	0													
2	25.2	0													
2	26.2	0													
2	27.2	0													
2	28.2	0													
2	29.2	0													
2	30.2	0													
2	31.2	0													
2	32.2	0													
2	33.2	0													
2	34.2	0													
2	35.2	0													
2	36.2	0													
2	37.2	0													
2	38.2	0													
2	39.2	0													
2	40.2	0													
2	41.2	0													
2	42.2	0													
2	43.2	0													
2	44.2	0													
2	45.2	0													
2	46.2	0													
2	47.2	0													
2	48.2	0													
2	49.2	0													
2	50.2	0													
2	51.2	0													
2	52.2	0													
2	53.2	0													
2	54.2	0													
2	55.2	0													
2	56.2	0													
2	57.2	0													
2	58.2	0													
2	59.2	0													
2	60.2	0													
2	61.2	0													
2	62.2	0													
2	63.2	0													
2	64.2	0													
2	65.2	0													
2	66.2	0													
2	67.2	0													
2	68.2	0													
2	69.2	0													
2	70.2	0													
2	71.2	0													
2	72.2	0													
2	73.2	0													
2	74.2	0													
2	75.2	0													
2	76.2	0													
2	77.2	0													
2	78.2	0													
2	79.2	0													
2	80.2	0													
2	81.2	0													
2	82.2	0													
2	83.2	0													
2	84.2	0													
2	85.2	0													
2	86.2	0													
2	87.2	0													
2	88.2	0													
2	89.2	0													
2	90.2	0													
2	91.2	0													
2	92.2	0													
2	93.2	0													
2	94.2	0													
2	95.2	0													
2	96.2	0													
2	97.2	0													
2	98.2	0													
2	99.2	0													
2	100.2	0													
2	101.2	0													
2	102.2	0													
2	103.2	0													
2	104.2	0													
2	105.2	0													
2	106.2	0													
2	107.2	0													
2	108.2	0													
2	109.2	0													
2	110.2	0													
2	111.2	0													
2	112.2	0													
2	113.2	0													
2	114.2	0													
2	115.2	0													
2	116.2	0													
2	117.2	0													
2	118.2	0													
2	119.2	0													
2	120.2	0													
2	121.2	0													
2	122.2	0													
2	123.2	0													
2	124.2	0													
2	125.2	0													
2	126.2	0													
2	127.2	0													
2	128.2	0													
2	129.2	0													
2	130.2	0													
2	131.2	0													
2	132.2	0													
2	133.2	0													
2	134.2	0													
2	135.2	0													
2	136.2	0													
2	137.2	0													
2	138.2	0													
2	139.2	0													
2	140.2	0													
2	141.2	0													
2	142.2	0													
2	143.2	0													
2	144.2	0													
2	145.2	0													
2	146.2	0													
2	147.2	0													
2	148.2	0													
2	149.2	0													
2	150.2	0													
2	151.2	0													
2	152.2	0													
2	153.2	0													



TABLE B34  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TINKER AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

WIND- BLOCK	BLCK TYPE (MIN)	TOTAL PEAKS	-0.9	0.0	0.5	0.6	0.7	LOAD FACTOR DISTRIBUTION (G)											
								0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0	
2	1 1	27.7	5						1	3	1								
2	1 2	396.1	1487				5	39	546	605	83	9							
2	1 3	49.7	501				1	24	150	231	77	7	2						
2	1 4	4.7	73				1	5	22	17	22	3	3						
2	2 1	83.5	49						19	29		1							
2	2 2	2791.0	9032				2	10	220	3373	4951	433	29	6					
2	2 3	594.0	3436				6	10	105	1242	1644	304	30	7					
2	2 4	28.5	380					5	26	111	164	64	7	3					
2	2 5	1.9	21					1	2	7	6	3	1	1					
2	3 1	21.3	14						5	11									
2	3 2	6811.7	20790				1	3	41	616	8168	10068	1003	82	8				
2	3 3	3624.7	18586				1	21	99	814	8261	7918	1368	176	26				
2	3 4	1176.4	9867				14	35	120	734	3336	4025	1230	279	92				
2	3 5	192.7	1785				8	14	50	133	346	584	283	84	52	10			
2	3 6	8.0	55						3	12	24	9	1	1	2				
2	4 2	126.1	543					1	4	24	214	268	26	5	1				
2	4 3	405.3	1030				2	2	19	66	364	467	90	14	5	1			
2	4 4	672.4	2981				4	13	46	214	1036	1248	327	67	22	3	1		
2	4 5	834.3	3888				14	24	67	309	1304	1526	429	117	71	5	2		
2	4 6	64.7	273					2	3	22	103	109	31	3					
2	4 7	0.5	0																
2	5 2	54.2	4						2	2									
2	5 3	130.5	78					2	30	45		1							
2	5 4	585.2	1225				2	2	13	72	323	509	86	14	4				
2	5 5	822.1	1863				3	6	29	105	807	765	116	23	9				
2	5 6	65.2	137				1	1	3	8	56	53	11	3					
2	6 2	24.3	11							4									
2	6 3	309.1	183							4	72	100	5	2					
2	6 4	1154.8	1546					3	13	81	630	724	84	8	3				
2	6 5	1440.7	3079				2	4	27	194	1232	1341	200	50	21	5	1		
2	6 6	43.1	80						2	6	31	33	6	2					
2	7 2	28.5	3							1									
2	7 3	472.3	323						2	13	138	153	13	2	2				
2	7 4	1131.9	1722				1	3	19	55	748	794	80	15	5	2			
2	7 5	1426.2	3659					3	29	161	1541	1668	213	42	2				
2	7 6	56.8	45						1	2	18	22	2						
2	8 4	1.5	0																
2	8 5	143.9	133				2		2	10	54	52	12	1					
2	9 3	5.5	6							1	1	3	2						
2	9 4	18.9	39							1	16	19	1	2					
2	9 5	23.6	138							5	61	59	10	2	1				
2	10 3	28.5	27							1	10	13	3						
2	10 4	13.7	47							6	19	16	5						
3	1 1	15.5	7							2	5								
3	1 2	851.3	3123					1	7	69	1122	1753	162	9					
3	1 3	142.7	1061						4	26	410	520	91	8	2				
3	1 4	2.3	24							1	8	6							
3	2 1	37.8	42							3	13	26							
3	2 2	4714.7	15290				1	1	17	315	5828	8475	621	30	2				
3	2 3	1826.2	8620				1	4	15	332	3341	4338	528	49	12				
3	2 4	53.4	647				1	1	5	40	213	287	81	16	3				
3	2 5	3.1	74						2	5	24	25	14	4					
3	3 1	6.2	12							7	7	5							
3	3 2	8637.3	24469					2	39	574	9734	13142	916	56	6				
3	3 3	10158.9	37831				4	13	137	1362	14514	19103	2401	259	37	1			
3	3 4	2773.0	17814				17	35	207	1129	6212	7792	1951	388	78	8			
3	3 5	398.7	3668				4	17	81	260	1148	1433	515	157	47	6			
3	3 6	5.2	56							5	23	20	5	2	1				
3	4 2	209.6	593						2	10	228	312	36	4	1				
3	4 3	720.2	2082					1	10	79	785	1023	199	23	2				
3	4 4	1128.2	4998				3	19	37	515	1754	2093	586	116	50	5			
3	4 5	1314.1	4562				8	22	61	322	1662	1931	423	96	36	1			
3	4 6	48.4	141						1	4	49	83	4						
3	4 7	0.4	0																
3	5 2	160.1	27							11	16								
3	5 3	521.0	116					1	3	51	54	5							
3	5 4	1224.5	2040				2	1	12	86	779	1028	117	12	3				
3	5 5	1533.1	2814				4	4	42	158	1078	1273	195	36	20	4			
3	5 6	42.4	72							5	31	31	3	1					
3	5 7	0.6	3																
3	6 2	132.8	15							8	7								
3	6 3	1067.5	297							5	118	167	6	1					
3	6 4	3206.8	3544				6	8	21	149	1344	1569	201	38	8				
3	6 5	2693.8	3930				2	3	17	173	1660	1830	204	30	11				
3	6 6	7	161							13	66	68	11	2					
3	7 2	290.4	14							4	13								
3	7 3	2239.7	771							14	300	434	22						
3	7 4	6079.7	4419				2	2	10	110	1929	2396	151	13	6				
3	7 5	4346.3	5322				3	4	16	170	2169	2724	207	22	7				
3	7 6	113.1	178						1	3	77	80	6	4					
3	8 2	0.1	0																
3	8 3	70.0	24							1	9	13	1						
3	8 4	74.1	146							8	61	56	13	5	1				
3	8 5	376.2	691				2	3	12	51	259	289	54	11	9				
3	8 6	0.3	1							1									
3	9 2	1.0	0																
3	9 3	364.1	161							2	55	103	1						
3	9 4	101.7	473				1	2	6	29	205	190	26	13	10	1			
3	9 5	113.2	213							3	76	124	11	2					
3	10 3	305.1	21							1	9	11							
3	10 4	406.8	612					1	4	30	222	319	29	3	3	1			
3	10 5	63.7	42								6	34	2						
4	1 1	1.1	1																
4	1 2	256.6	1270							33	493	714	60	1					
4	1 3	65.5	607							15	235	324	31	2					
4	1 4	0.2	0																
4	2 1	1.7	1																
4	2 2	746.0	3625							77	1245	2135	158	4					
4	2 3	956.0	9916				1	8	382	2398	2994	342	11						
4	2 4	29.9	301					5	32	98	132	25	7	1	1				



TABLE B34 continued  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TINIAN AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

N-M-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)															
			-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.8	2.0
4 2 5	0.9	0							1	2	2	1						
4 3 1	0.3	0																
4 3 2	1910.0	6200			1	0		143	2320	3570	224	11	1					
4 3 3	9104.2	22329			4	70		799	8376	11934	1499	100	3					
4 3 4	1924.6	7211			10	92		420	2324	3202	771	128	24					
4 3 5	163.9	842			4	6		51	262	369	110	29	7					
4 3 6	2.9	24			2			2	10	6	5							
4 4 2	61.6	241						6	101	124	0	2						
4 4 3	986.2	3953			2	19		137	1475	2030	265	27	2					
4 4 4	595.2	2612			3	35		176	897	1096	329	64	12					
4 4 5	737.4	1896			1	7	21	96	676	800	170	25	11					
4 4 6	16.8	27						1	13	10	5							
4 4 7	15.7	1							1									
4 4 8	171.1	25							11	14								
4 4 9	290.9	274						10	66	116	12							
4 4 10	762.1	1292			1	3	5	62	920	619	60	10	3	1				
4 4 11	13.3	7							7	5								
4 4 12	0.6	0																
4 4 13	191.3	10							9	9								
4 4 14	690.7	476			1			23	208	215	24	3	1					
4 4 15	1110.9	1299			1	5		45	930	666	44	3	1					
4 4 16	17.2	24						1	12	10								
4 4 17	23.0	0																
4 4 18	402.6	51							25	25								
4 4 19	1246.2	627			1	3		17	233	357	27	7	2					
4 4 20	1674.7	2243			1	1	10	75	914	1101	123	17	2	1				
4 4 21	24.7	60						6	24	26	2							
4 4 22	0.3	0																
4 4 23	5.1	1							1									
4 4 24	0.9	0							3	5								
4 4 25	180.1	160						1	73	42	2							
4 4 26	3.0	3							1	2								
4 4 27	36.0	17							1	12	2							
4 4 28	30.5	742			1	1		19	94	100	21	6						
4 4 29	25.8	36						2	14	17	1	2						
4 4 30	3.8	0																
4 4 31	41.2	12							1	10	1							
4 4 32	19.4	6								6								
4 4 33	36.6	178						3	47	122	6							
4 4 34	12.9	66							26	30	7							
4 4 35	0.9	0																
4 4 36	124.8	434						4	123	204	23							
4 4 37	164.2	791					1	19	200	403	37	1						
4 4 38	6.9	23							5	14	4							
4 4 39	0.5	0																
4 4 40	0.4	0																
4 4 41	115.7	315						6	110	160	11							
4 4 42	795.7	2110						71	700	1153	99	5						
4 4 43	244.9	749			1	4		41	280	344	69	9	1					
4 4 44	79.4	290			1	1	6	13	96	129	17	5	2					
4 4 45	0.5	3																
4 4 46	5.0	6							1	5								
4 4 47	81.5	706						8	101	160	15	1	1					
4 4 48	136.9	194						13	66	97	15	1						
4 4 49	312.2	454			1	1		9	170	234	43	5	2	1				
4 4 50	4.7	10						2	3	10	1							
4 4 51	0.6	1							5									
4 4 52	40.9	14							5	5								
4 4 53	127.7	113			1			6	32	42	9	3	1					
4 4 54	392.3	404						23	170	194	16	2	1					
4 4 55	5.4	10							3	5	2							
4 4 56	4.4	0																
4 4 57	116.6	6						1	2	3								
4 4 58	930.0	232						6	111	122	12	1						
4 4 59	694.7	486					2	8	207	244	20	5						
4 4 60	5.4	22							12	10								
4 4 61	13.0	0																
4 4 62	307.3	45						1	14	30	7	1						
4 4 63	1154.1	305						8	197	210								
4 4 64	1344.0	1000					4	30	403	576	50	5	2					
4 4 65	20.2	90							13	36	1							
4 4 66	34.5	0																
4 4 67	25.7	7						1	3	2	1							
4 4 68	101.3	50						2	12	23	2							
4 4 69	46.6	10								9								
4 4 70	56.2	10							10									
4 4 71	61.0	24					1	1	10	12								
4 4 72	12.0	1								1								
4 4 73	75.7	16																
TOTAL	111714.7	311266	0	0	173	337	1740	12736	117591	199732	21104	10000	703	63	6	1	0	0



TABLE B35  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TINER AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

W-W-A BLOCK		BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	0.9	DISTRIBUTION (G)									
											1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0	
3	2	2	4.9	24							8	15	1							
3	2	3	0.5	5							3	2								
3	3	2	14.0	43						1	14	26								
3	3	3	94.9	107						4	40	54	8	1						
3	3	4	4.4	0																
3	4	3	5.0	0																
3	4	4	23.0	7																
3	4	5	4.7	13				1	2	3	5	7								
3	5	4	8.0	2								2								
3	5	5	3.9	0																
3	6	4	0.5	0																
3	6	5	4.0	1																
3	7	3	6.3	0								1								
3	7	4	10.6	1																
3	7	5	19.9	0							1									
3	7	6	0.5	0						3	4	1								
3	8	4	4.3	0																
3	8	5	2.5	0																
3	9	4	6.3	0																
3	9	5	0.5	1																
3	10	4	98.0	22						12	10									
4	2	2	1.4	5						2	3									
4	2	3	0.4	1							1									
4	3	3	1.8	0																
4	3	4	5.5	0																
4	4	3	4.6	0																
4	4	4	1.9	0																
4	4	5	4.2	0					1		4									
4	5	4	4.0	7						1	5	1								
4	5	5	4.3	0																
4	6	5	2.1	0																
4	7	5	8.4	0																
4	7	6	0.4	0																
TOTAL		290.4	253	0	0	0	0	1	8	89	143	11	1	0	0	0	0	0	0	



TABLE B36  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TRAVIS AIR FORCE BASE  
LOGISTICS, MEDIUM RANGE MISSION  
DATA SAMPLE

W-H-B BLOCK	FLICK TYPE (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																
			-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.5	1.6	1.8	2.0	2.5	3.0
2 1 2	9.0	21							9	12									
2 2 2	28.7	57							24	28	1								
2 2 3	C.5	1							1										
2 2 4	3.0	24							8	14	2								
2 3 2	47.7	88					1	4	30	47	6								
2 3 3	13.8	34						4	14	14	2								
2 3 4	15.7	112					1	8	44	37	16	6							
2 3 5	2.2	7							1	2									
2 4 3	2.0	0																	
2 4 4	17.4	71					3	11	20	22	8	2	3	1					
2 4 5	22.5	57					2	7	15	24	6	2			1				
2 5 4	7.9	12						1	7	4									
2 5 5	19.6	98							40	52	6								
2 6 4	3.0	4							2	2									
2 6 5	18.8	25						2	11	14	1								
2 7 4	4.0	1							1	1									
2 7 5	19.5	26						1	8	12	5								
2 8 4	2.0	3							1	2									
2 8 5	41.1	12							6	6									
2 9 4	75.1	56					2	4	25	16	4	2	1	1					
2 9 5	16.5	24						3	9	8	3	1							
2 10 4	83.0	67						2	17	44	4								
2 10 5	17.5	0																	
3 1 2	194.5	258						2	94	153	3	1							
3 1 3	22.5	30						1	13	15	1								
3 1 4	3.3	26						1	13	12									
3 2 2	340.4	437						9	163	249	16								
3 2 3	98.5	107						4	38	60	5								
3 2 4	31.3	94						3	32	55	3	1							
3 2 5	4.2	17							1	4	2								
3 3 2	206.6	344						2	136	192	13	1							
3 3 3	413.5	487						16	190	268	13								
3 3 4	233.4	322						22	191	267	30	5	1						
3 3 5	44.8	143						9	52	111	19	3							
3 3 6	1.7	4							1	2	1								
3 4 2	29.3	78						1	27	45	4								
3 4 3	144.5	115						1	46	60	6								
3 4 4	377.4	452						9	172	250	20			1					
3 4 5	326.4	475						24	179	229	29	6	1						
3 4 6	11.7	23							10	4	5								
3 5 3	29.3	47						3	14	27	2	1							
3 5 4	92.9	114						2	37	65	8	2							
3 5 5	307.2	386						32	105	184	36	8	3	1					
3 5 6	4.0	0																	
3 6 3	14.1	7						2	1	2									
3 6 4	81.3	74						2	28	35	4	2	2	1					
3 6 5	530.5	317						10	113	173	14	3	1						
3 6 6	C.5	0																	
3 7 3	32.9	4								3	1								
3 7 4	158.1	169						3	65	96	5								
3 7 5	1055.1	798						15	162	473	39	1	1						
3 7 6	2.4	1							3	7									
3 8 3	64.5	60							1										
3 8 4	92.6	60							23	15	6	3	5	2					
3 8 5	1791.9	913						22	155	490	31	4							
3 9 3	4.3	0																	
3 9 4	2764.2	1938						64	700	1056	86	9	1						
3 9 5	2522.2	1370						51	520	703	71	5	5						
3 10 3	102.8	9							2	6	1								
3 10 4	6132.6	2103						72	640	1204	141	21	7						
3 10 5	297.1	72						1	25	46									
4 1 2	142.1	202							64	132	7								
4 1 3	31.9	95						1	32	58	3	1							
4 1 4	1.6	17						1	6	10									
4 1 5	C.3	0																	
4 2 1	1.0	0																	
4 2 2	152.7	148						2	57	87	2								
4 2 3	159.4	215						5	94	107	9								
4 2 4	10.1	102					1	7	31	53	9	1	1						
4 2 5	4.7	42						2	12	23	3	1	1						
4 3 2	127.3	75						1	29	42	3								
4 3 3	428.9	568						9	200	340	18	1							
4 3 4	175.5	161						9	129	193	24	4							
4 3 5	89.9	336						15	115	161	28	12			1				
4 3 6	3.3	3							2		1								
4 4 2	4.3	0																	
4 4 3	119.5	39							12	27									
4 4 4	203.7	241						4	95	121	12	2	3						
4 4 5	346.1	682						45	214	336	55	15	11						
4 4 6	2.7	17							3	11	1	1							
4 5 3	32.4	8							1	7									
4 5 4	70.3	92						11	26	35	12		1	1	1				
4 5 5	408.5	461						20	156	237	31	5	1	2	1				
4 5 6	12.0	2								2									
4 6 3	14.2	2							1	1									
4 6 4	39.7	34						2	24	27	1								
4 6 5	611.4	250						5	85	152	7	1							
4 6 6	3.5	0																	
4 7 3	26.0	0																	
4 7 4	299.0	94						1	35	56	1								
4 7 5	1004.0	227						10	90	111	11	2							
4 7 6	3.5	1																	
4 8 3	96.0	0																	
4 8 4	125.8	3								3									
4 8 5	1450.8	992						1	6	14	31	150	503	61	20	6			
4 8 6	0.9	0																	
4 9 4	4384.4	1948						2	3	10	72	750	996	111	16	8			
4 9 5	8684.3	2935						3	7	95	1693	1586	131	15	5				
4 10 3	198.5	27								19	8								
4 10 4	24942.2	3825						1	5	6	68	1319	2281	127	20				



TABLE B34 continued  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TRAVIS AIR FORCE BASE  
LOGISTICS, MEDIUM RANGE MISSION  
DATA SAMPLE

U-WH-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)															
			-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
4 10 5	576.7	47							23	24								
5 1 2	63.5	114						1	26	84	3							
5 1 3	90.5	127					1		37	83	4							
5 1 4	2.0	12								11	1							
5 1 5	1.2	3							1	2								
5 2 2	14.2	24							8	15	1							
5 2 3	63.5	99						2	39	55	3							
5 2 4	12.5	55							18	34	3							
5 2 5	6.9	24							6	17	1							
5 3 2	13.9	9							2	7								
5 3 3	111.5	89				1		5	33	42	7	1						
5 3 4	66.2	218						3	86	112	14	3						
5 3 5	116.1	343					4	20	116	169	24	8	2					
5 3 6	3.6	12							3	9								
5 4 3	25.9	3							2	1								
5 4 4	36.7	23							10	15								
5 4 5	302.1	275			1		2	16	85	140	25	3	3					
5 4 6	6.2	22			1				7	10	1	2	1					
5 5 3	5.5	0																
5 5 4	8.0	3																
5 5 5	444.5	151			1		3	4	51	83	5		3		1			
5 5 6	105.5	12							2	10								
5 6 3	2.0	0																
5 6 4	12.2	8							1	7								
5 6 5	496.4	227					2	7	90	104	21	2	1					
5 7 3	1.0	0																
5 7 4	387.7	85						1	51	33								
5 7 5	1091.2	219				1		6	92	116	3	1						
5 8 4	29.5	3							1	2								
5 8 5	1493.4	771				3	3	29	337	358	33	6	2					
5 9 4	5159.1	1833			1	1	7	53	668	1007	81	14	1					
5 9 5	8452.2	2355			1	1	12	57	890	1295	84	11	1					
5 10 3	131.7	2								2								
5 10 4	19911.1	3225			2	1	11	75	1177	1805	133	19		2				
5 10 5	342.0	42							20	22								
6 1 2	32.1	42							14	48								
6 1 3	93.1	139							41	91	7							
6 1 4	8.9	25							9	14	2							
6 1 5	1.6	15								14	1							
6 2 2	4.5	13							5	8								
6 2 3	72.0	93						3	28	95	6	1						
6 2 4	27.2	79						2	31	39	7							
6 2 5	19.0	84						6	23	44	10	1						
6 2 6	1.0	0																
6 3 2	3.9	0																
6 3 3	94.0	89					1	3	34	46	4	1						
6 3 4	68.8	137					1	8	55	67	6							
6 3 5	189.4	490				1	5	26	166	243	43	6						
6 3 6	1.7	3						1		2								
6 4 2	0.5	0																
6 4 3	28.0	21						1	8	12								
6 4 4	27.2	12							4	7	1							
6 4 5	352.3	248			1	1	6	6	85	136	28	5						
6 4 6	1.0	0																
6 5 4	19.2	0																
6 5 5	401.2	57						1	30	26								
6 5 6	1.0	0																
6 6 4	5.5	0																
6 6 5	450.8	41						1	13	27								
6 7 4	6.5	0																
6 7 5	519.1	173					4	9	64	84	9	3						
6 8 4	8.5	0																
6 8 5	987.9	946					1	11	259	250	21	4						
6 9 4	593.4	162						4	67	83	6							
6 9 5	3363.3	1511				2	6	51	620	793	71	7		1				
6 10 4	1231.5	219							78	139	2							
6 10 5	39.0	1							1									
TOTAL	114181.6	41569	0	0	33	59	195	1263	15088	22507	2017	305	85	13	4	0	0	0



TABLE B37  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TRAVIS AIR FORCE BASE  
LOGISTICS, LONG RANGE MISSION  
DATA SAMPLE

U-M-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS	-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.5	3.0
2 1 2	2.1	1							1									
2 2 2	7.5	1							1									
2 2 3	1.5	0																
2 2 4	0.5	2							2									
2 3 2	1.0	0																
2 3 3	0.5	0																
2 3 4	0.0	10							6	4								
2 4 4	3.5	0																
2 4 5	3.5	0						1	3	1								
2 5 4	0.5	0																
2 5 5	0.5	0							2	6	1							
2 6 5	2.0	3							3									
2 7 5	2.0	0																
2 8 5	2.0	2								2								
2 9 4	1.0	1							1									
2 9 5	1.0	0																
2 10 4	1.0	0																
3 1 2	73.5	03						1	30	42	2							
3 1 3	2.4	0																
3 2 2	100.0	40							23	22	1							
3 2 3	35.0	12							6	6								
3 2 4	13.3	13							5	8								
3 3 2	47.5	10							4	13	1							
3 3 3	30.5	97						1	24	31	1							
3 3 4	40.2	67						2	25	34	5	1						
3 3 5	10.4	20							10	17	1							
3 4 2	4.8	0																
3 4 3	23.4	6							3	3								
3 4 4	07.9	71						1	34	34	2							
3 4 5	50.3	30						1	10	17	1	1						
3 5 2	1.5	1								1								
3 5 3	5.6	3							2	1								
3 5 4	22.5	1							1									
3 5 5	90.1	97					1	1	10	33	3							
3 6 6	1.0	0																
3 6 2	2.0	0																
3 6 3	0.2	0																
3 6 4	0.5	0							1	7								
3 6 5	102.4	10							6	0	3	1						
3 7 3	3.0	0																
3 7 4	9.0	3							2	1								
3 7 5	110.4	20							9	11								
3 8 3	4.2	0																
3 8 4	10.0	1							1									
3 8 5	91.0	23							0	13	2							
3 9 4	604.5	46						1	19	26								
3 9 5	393.0	40						1	12	27								
3 10 4	3770.0	602						10	250	314	20							
4 9 4	641.2	235						4	100	110	3							
4 9 5	474.0	40							23	17								
4 10 3	23.0	1								1								
4 10 4	7300.0	1199					1	7	11	309	711	10			1			
5 6 5	0.5	0																
5 7 5	0.5	0																
5 8 5	20.0	1								1								
5 9 4	1349.0	274						9	93	194	12	1	4					
5 9 5	1900.0	124						3	40	70	3	1	1					
5 10 4	9471.0	1100						1	26	406	619	41	3	1				
6 10 5	36.0	0																
6 1 2	12.4	20							6	20								
6 1 3	25.3	64						1	25	34	2							
6 1 4	1.5	11							4	7								
6 1 5	0.1	3							2	1								
6 2 3	17.0	20						1	0	19								
6 2 4	5.0	17						4	0	11	2							
6 2 5	3.7	10						2	6	6	7							
6 3 3	0.0	0						1	4	4								
6 3 4	10.7	36							10	17	1							
6 3 5	90.7	147					4	7	97	71	7	1						
6 3 6	0.2	0																
6 4 4	2.2	0																
6 4 5	90.4	100					1	7	34	81	20	3	1					
6 4 6	0.5	0																
6 5 3	107.0	32						1	10	21								
6 5 6	1.0	0																
6 6 4	1.0	0																
6 6 5	100.0	00					1	1	30	90	0							
6 7 5	100.2	40							9	30	1							
6 8 4	1.5	0																
6 8 5	201.4	120						2	40	94	3							
6 9 4	270.3	300					1		0	100	10							
6 9 5	724.5	491					2	22	190	290	27	2						
6 10 4	674.0	41							32	10	1							
6 10 5	29.0	0							4	2								
TOTAL	20055.4	9990	0	0	2	0	10	131	2030	2000	216	14	0	0	0	0	0	0







TABLE B19  
DISTRIBUTION OF GUST LOAD FACTORS  
FOR THE  
TRAVIS AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

U-M-A BLOCK	BLOCK TIME (MIN)	TOTAL PEAKS						LOAD FACTOR DISTRIBUTION (G)											
			-0.5	0.0	0.5	0.6	0.7	0.8	0.9	1.1	1.2	1.3	1.4	1.5	1.6	2.0	2.5	3.0	
3 1 2	14.4	96						4	33	50	1								
3 1 3	9.4	29							0	16									
3 2 2	16.5	76						1	32	40	3								
3 2 3	26.1	103						3	34	62	4								
3 2 4	3.2	5							1	4									
3 2 5	1.0	0																	
3 3 2	10.0	17							0	9	2								
3 3 3	30.0	97						1	30	33	4	1							
3 3 4	5.4	4							2	2									
3 3 5	4.4	1								1									
3 4 3	12.0	13							0	7									
3 4 4	10.4	6							3	3									
3 4 5	3.7	1								1									
3 5 2	1.0	0																	
3 5 3	10.0	0																	
3 5 4	10.1	2							1	1									
3 5 5	19.3	14							7	7									
3 6 4	1.4	1								1									
3 6 5	5.3	2							1	1									
3 6 6	24.4	4							2	2									
3 6 7	7.0	0																	
3 7 2	0.0	0																	
3 7 3	7.2	3						1	1	1									
3 7 4	17.5	26						1	11	10	4								
3 7 5	25.0	6					1		4	1									
3 8 4	1.1	0																	
3 8 5	7.5	2							1	1									
3 9 4	2.2	1						1	2	2									
3 9 5	1.0	0																	
10 3	0.0	0																	
10 4	11.2	33							1	26	6								
4 1 2	1.0	4								0									
4 1 3	0.2	1								1									
4 2 3	1.3	0																	
4 2 4	0.3	3							1	1	1								
4 2 5	0.3	2							1	1									
4 3 3	0.7	0																	
4 3 4	1.0	0																	
4 3 5	1.2	3								3									
4 4 5	2.7	0																	
4 5 5	2.2	4							0										
4 6 1	2.4	2							1	1									
4 7 4	1.0	0																	
4 7 5	12.1	3							2	1									
TOTAL	321.7	990	0	0	0	0	1	12	204	315	29	1	0	0	0	0	0	0	0



TABLE 240  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
CHARLESTON AIR FORCE BASE  
LOGISTICS, MEDIUM RANGE MISSION  
DATA SAMPLE

U-100-A	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																
BLANK	FILES	PEAKS	-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	0	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35
2 1 2	7.5	43							1	2	14	10	9	3					
2 2 2	9.2	31							1	3	6	10	6	3	2				
2 3 3	6.0	14								3	3	5	3						
2 4 4	9.9	20								1	1	12	9	1					
2 5 4	6.9	1																	
2 6 3	2.3	0																	
2 7 4	10.4	0																	
2 8 5	20.4	0																	
2 9 5	20.4	0																	
2 10 5	16.0	0																	
2 11 5	20.5	0																	
2 12 4	6.0	0																	
2 13 5	13.5	0																	
2 14 4	125.4	0																	
3 1 2	214.0	191						1	0	20	33	95	47	13	4	1			
3 2 3	116.4	65						1	2	6	21	10	0	6	2				1
3 3 4	43.5	60						1	1	4	21	24	6	3					
3 4 2	274.7	320				1	1	4	9	74	40	59	60	62	27	5	1	1	
3 5 3	159.5	120						1	1	7	11	36	40	22	7	3			
3 6 4	110.1	132				1	1		4	13	43	49	29	9	9			2	
3 7 5	0.3	0						1				3	3	1	1				
3 8 2	71.7	40							2	9	9	12	5	2			1		
3 9 3	165.7	67							2	0	27	21	0	1					
3 10 4	200.0	207							1	5	17	51	79	24	12	12	2	1	3
3 11 5	70.4	12									3	4	3	2					
3 12 3	90.0	60							2	4	7	23	16	12	3	2			
3 13 4	337.0	136							1	5	9	32	65	19	3	2	1		
3 14 5	270.0	97								2	5	7	33	32	10	3	3	1	
3 15 6	5.0	0																	
3 16 4	126.4	50									3	15	27	0	1	1	1		
3 17 5	494.2	94								2	1	17	42	13		1			
3 18 6	10.4	0																	
3 19 3	4.5	0																	
3 20 4	141.0	16										6	6	4					
3 21 5	1603.3	37									4	11	19	7	1				
3 22 6	30.2	3											2	1					
3 23 3	2.2	0																	
3 24 4	135.4	6									1	1	3	1					
3 25 5	700.1	101							2	1	2	35	37	10	4	2			
3 26 6	117.1	9										4	1						
3 27 3	1463.3	46							1		7	10	14	0	3	2	2		
3 28 4	10.0	0																	
3 29 5	0154.4	129								1		5	42	64	5	2	1		
3 30 6	2750.4	14									2	5	4	1	1				1
3 31 3	0.0	0																	
3 32 4	11121.1	400							2	2	2	0	32	152	164	27	0	1	
4 1 2	53.7	40										9	13	11	14				
4 2 3	7.1	6										1	1	4					
4 3 4	0.7	0																	
4 4 5	101.7	73								1	15	24	15	13	3	2			
4 5 6	101.7	110								1	10	31	30	21	4	1			
4 6 3	20.2	7										1	1						
4 7 4	3.1	0																	
4 8 5	20.4	2										2							
4 9 6	143.0	64										3	26	9	3				
4 10 3	100.3	70								2	1	6	16	40	7	3	3	1	
4 11 4	64.1	0										1	0	1	1				
4 12 5	0.0	3											3						
4 13 6	193.0	67								1	4	0	20	21	0	9			
4 14 3	200.0	14										7	6	2	1				
4 15 4	0.0	0																	
4 16 5	05.0	0										1	7	1					
4 17 6	133.0	23									1	1	7	10	3	1			
4 18 3	41.0	0																	
4 19 4	2730.5	23									3	7	12		1				
4 20 5	71.0	14									1	7	4	2					
4 21 6	1407.0	10									2	5	0	2	1				
4 22 3	17.1	10										4	5	1					
4 23 4	3770.4	126										34	67	0	3				
4 24 5	4705.0	300								1	13	133	200	13	3				
4 25 6	0627.0	27										9	15	2	1				
4 26 3	49240.4	224									1	6	64	121	12	2			
4 27 4	23.1	0																	
4 28 5	00.2	42								2	1	0	3	11	0	0	1		
4 29 6	30.0	34								1	1	0	5	0	0				
4 30 3	0.0	1											1						
4 31 4	3.4	3											1	1					
4 32 5	70.7	11									3	2	2	3	1				
4 33 6	10.1	11									1	4	2	3	1				
4 34 3	0.1	1										1							
4 35 4	47.0	3											2	1					
4 36 5	00.0	70								1	0	0	0	4	1	2			
4 37 6	179.0	64								2	0	20	15	15	9	1	1	1	
4 38 3	2.7	0																	
4 39 4	12.7	3											1	2					
4 40 5	940.1	00												0	3				
4 41 6	10.1	0																	
4 42 3	2.4	0																	
4 43 4	040.1	00																	
4 44 5	100.3	94																	
4 45 6	0.0	0																	
4 46 3	2317.0	12											7	0	4				
4 47 4	0.0	0																	
4 48 5	0.0	0																	
4 49 6	4215.0	100										1	1						
4 50 3	40210.0	937																	
4 51 4	11057.0	110																	
4 52 5	14.0	0																	
4 53 6	20437.0	907																	
4 54 3	22.0	0																	



TABLE 240 concluded  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
CHARLESTON AIR FORCE BASE  
LOGISTICS, MEDICAL RANGE MISSION  
DATA SAMPLE

U-NO-A BLOCK	ADDITIONAL FILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)													
			-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	0	+7.5	+10	+12.5	+15-17.5
0 1 2	46.8	41					1	2		9	1	5	9	8	3	2
0 1 3	90.8	129				1	1	9	12	21	10	23	21	19	9	1
0 1 4	11.7	11								1	5	5				
0 1 5	9.1	6									2	3	1			
0 2 2	2.4	0														
0 2 3	74.1	72				1		2	7	11	12	15	15	9		4
0 2 4	29.3	53							3	3	14	10	11	2	1	1
0 2 5	23.0	19						1		2	4	10	2			
0 3 3	27.4	17						2	1	1	3	4	9	1		
0 3 4	139.7	100					1	4	1	14	25	31	17	12	2	1
0 3 5	247.1	126							5	9	16	41	23	10	2	
0 3 6	12.1	0														
0 4 4	40.3	24							2	1	4	4	3	6	3	1
0 4 5	692.1	160				2	1	9	5	6	44	63	31	7	2	1
0 4 6	0.4	0														
0 5 4	101.4	2										2				
0 5 5	769.2	154					1	1	4	13	33	53	10	9	4	2
0 5 6	19.2	0														
0 6 4	23.3	2								1		1				
0 6 5	936.0	72						3	2	7	16	30	3	3		
0 6 6	13.3	0														
0 7 4	20.0	0														
0 7 5	934.1	39								3	10	10	3		1	
0 8 4	46.0	0														
0 8 5	1590.7	42						1	1	3	9	25	2	1		
0 9 4	4993.6	40						1	1	2	14	27	2	1	1	
0 9 5	2304.7	100				1	1	1	2	3	15	37	25	9	2	1
0 10 4	1926.0	25								1	0	13				
TOTAL	251390.1	7362	0	0	1	9	19	19	75	107	977	2101	3047	899	314	109



TABLE B41  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
CHARLESTON AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

WIND-0 DIRECTION	WIND-0 SPEED	TOTAL PLOTS	GUST DISTRIBUTION (FT./SEC.)													
			-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50
2 1 2	14.4	83														
2 2 2	110.9	457														
2 3 2	32.7	101														
2 4 2	30.7	100														
2 5 2	30.6	100														
2 6 2	2.0	0														
2 7 2	72.0	207														
2 8 2	0.2	26														
2 9 2	100.0	406														
2 10 2	02.4	176														
2 11 2	10.2	27														
2 12 2	00.2	176														
2 13 2	70.7	257														
2 14 2	07.5	150														
2 15 2	0.1	13														
2 16 2	0.2	5														
2 17 2	70.1	15														
2 18 2	00.0	42														
2 19 2	0.0	1														
2 20 2	0.0	0														
2 21 2	70.1	1														
2 22 2	7.0	0														
2 23 2	32.0	2														
2 24 2	2.7	1														
2 25 2	00.7	0														
2 26 2	1.1	0														
2 27 2	170.2	11														
2 28 2	17.0	2														
2 29 2	7.1	0														
2 30 2	1010.0	20														
2 31 2	1.0	2														
2 32 2	1.7	1														
2 33 2	2.0	1														
2 34 2	10.7	10														
2 35 2	9.0	1														
2 36 2	3.0	1														
2 37 2	9.3	0														
2 38 2	13.0	0														
2 39 2	0.0	0														
2 40 2	11.1	0														
2 41 2	20.1	0														
2 42 2	00.7	7														
2 43 2	20.2	7														
2 44 2	70.0	0														
2 45 2	303.7	2														
2 46 2	2000.0	14														
2 47 2	3.0	14														
2 48 2	00.1	11														
2 49 2	1.0	9														
2 50 2	0.0	9														
2 51 2	0.1	7														
2 52 2	7.7	0														
2 53 2	12.0	0														
2 54 2	27.0	2														
2 55 2	70.7	2														
2 56 2	00.0	2														
2 57 2	00.0	1														
2 58 2	00.0	1														
2 59 2	307.0	207														
2 60 2	70.2	7														
2 61 2	1402.7	00														
TOTAL	03700.0	3143	0	0	0	0	0	20	71	204	400	730	007	000	100	03 14 3 0 0 0 0



TABLE 248  
DISTRIBUTION OF DERIVED OPTICAL GUST VELOCITY  
FOR THE  
CHARLESTON AIR FORCE BASE  
HISDALEMAN PISTON  
DATA SAMPLE

DOWN-0	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
BLUES	PILOTS	PILOTS	-30	-20	-10	-5	0	5	10	15	20	25	30	35	40	45	50	60				
1 1 2	20.1	20																				
2 1 3	6.3	1																				
3 1 4	9.0	1																				
4 1 5	9.1	0																				
5 2 2	13.3	0																				
6 2 3	11.4	0																				
7 2 4	112.0	12																				
8 2 5	11.1	0																				
9 2 6	20.0	0																				
10 3 3	40.0	12																				
11 3 4	40.0	0																				
12 3 5	6.2	0																				
13 3 6	9.4	0																				
14 3 7	91.0	76																				
15 3 8	110.0	169																				
16 3 9	7.2	1																				
17 3 10	1.2	1																				
18 3 11	197.0	11																				
19 3 12	91.0	2																				
20 3 13	101.7	64																				
21 3 14	177.0	75																				
22 3 15	13.7	0																				
23 3 16	10.1	0																				
24 3 17	10.0	0																				
25 3 18	60.1	47																				
26 3 19	97.1	11																				
27 3 20	10.0	0																				
28 3 21	91.2	12																				
29 3 22	203.0	19																				
30 3 23	2.0	0																				
31 3 24	10.1	20																				
32 3 25	40.0	9																				
33 4 1	1.2	12																				
34 4 2	2.7	10																				
35 4 3	2.4	9																				
36 4 4	1.0	3																				
37 4 5	1.0	1																				
38 4 6	2.1	2																				
39 4 7	1.2	0																				
40 4 8	17.1	6																				
41 4 9	12.0	0																				
42 4 10	41.0	1																				
43 4 11	10.1	0																				
44 4 12	75.0	0																				
45 4 13	12.0	0																				
46 4 14	43.2	9																				
47 4 15	130.7	1																				
48 4 16	10.1	0																				
TOTAL	2120.7	516	0	0	0	2	0	3	2	10	20	174	210	64	23	9	4	3	1	1	0	0

TABLE 249  
DISTRIBUTION OF DERIVED OPTICAL GUST VELOCITY  
FOR THE  
CHARLESTON AIR FORCE BASE  
FLIGHT TEST PISTON  
DATA SAMPLE

DOWN-0	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
BLUES	PILOTS	PILOTS	-30	-20	-10	-5	0	5	10	15	20	25	30	35	40	45	50					
1 1 2	13.4	27																				
2 1 3	75.2	91																				
3 1 4	1.1	3																				
4 2 4	1.0	4																				
5 2 5	6.4	0																				
6 2 6	10.4	7																				
7 2 7	2.3	0																				
8 3 4	11.4	7																				
9 3 5	8.1	1																				
10 3 6	9.0	0																				
11 3 7	9.0	0																				
12 3 8	10.1	10																				
13 3 9	11.1	0																				
14 3 10	20.1	1																				
15 3 11	37.0	0																				
16 3 12	9.0	0																				
17 3 13	97.1	0																				
18 3 14	23.3	0																				
19 3 15	7.0	0																				
20 4 4	109.3	1																				
TOTAL	490.0	107	0	0	0	0	0	3	5	7	13	37	43	30	10	4	2	0	1	0	0	0



TABLE 204  
DISTRIBUTION OF SERVICE VERTICAL GUST VELOCITY  
FOR THE  
DOWN AIR FORCE BASE  
LOGISTICS, MEDICAL SARGE DIVISION  
DATA SAMPLE

[illegible]



TABLE B44 continued  
DISTRIBUTION OF SURFACED VERTICAL GUST VELOCITY  
FOR THE  
DOVER AIR FORCE BASE  
LOGISTICS, MEDIAN RANGE MISSION  
DATA SAMPLE

[illegible]



TABLE B45  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
DOVER AIR FORCE BASE  
LOGISTICS, LONG RANGE MISSION  
DATA SAMPLE

U-28-1 BLDN	VERTICAL PEAKS	TOTAL PEAKS	-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35	
2 10 3	200.7	0																		
3 1 3	4.1	21								2	7	9	3							
3 2 3	12.3	11									0	5								
3 3 4	1.0	0																		
3 4 4	7.3	0																		
3 5 4	10.2	0																		
3 6 4	9.0	0																		
3 7 4	4.0	0																		
3 8 4	17.1	0																		
3 9 4	10.4	0																		
3 10 4	12.3	0																		
3 11 4	15.0	0																		
3 12 4	100.7	2																		
3 13 4	100.5	0																		
3 14 4	700.7	0																		
4 0 0	1000.0	2																		
4 10 0	200.4	11								1	4	5	1							
4 20 0	1000.0	10								0	0	20	1							
4 30 0	1000.0	10								0	0	20	1							
4 40 0	1000.0	200								1	00	07	100	10	0					
4 50 0	4.0	1								1										
4 60 0	1.0	0																		
4 70 0	7.2	0																		
4 80 0	9.0	0																		
4 90 0	13.0	0																		
4 100 0	20.2	3								1	1					1				
4 110 0	10.0	1																		
4 120 0	20.7	1																		
4 130 0	13.2	0																		
4 140 0	44.4	0																		
4 150 0	00.2	100																		
4 160 0	7.1	1																		
4 170 0	1.1	1																		
TOTAL	0000.0	000	0	0	0	0	2	0	1	0	47	101	219	00	10	4	3	0	0	0



**TABLE B46**  
**DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY**  
**FOR THE**  
**DOVER AIR FORCE BASE**  
**TRAINING MISSION**  
**DATA SAMPLE**

BLOCK	NAUTICAL FILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																				
			-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	-2.5	+2.5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30+35
2 1 1	0.2	0																					
2 1 2	230.8	658																					
2 1 3	81.9	150																					
2 1 4	29.1	6																					
2 2 2	278.3	490																					
2 2 3	311.9	634																					
2 2 4	93.1	162																					
2 2 5	2.7	10																					
2 3 2	133.3	209																					
2 3 3	277.9	299																					
2 3 4	124.9	323																					
2 3 5	12.3	25																					
2 4 2	1.9	1																					
2 4 3	27.8	9																					
2 4 5	10.7	27																					
2 5 3	43.4	0																					
2 5 5	6.0	0																					
2 5 6	3.0	0																					
2 6 3	3.2	0																					
2 6 5	15.7	0																					
2 7 5	37.4	0																					
2 8 5	14.6	0																					
2 9 5	7.9	0																					
2 10 4	710.1	0																					
2 10 5	7.9	0																					
3 1 1	0.1	0																					
3 1 2	882.7	2192																					
3 1 3	290.6	862																					
3 1 4	154.2	538																					
3 1 5	418.4	1117																					
3 1 6	32.6	6																					
3 2 2	1122.9	1904																					
3 2 3	2244.3	3350																					
3 2 4	356.4	1044																					
3 2 5	170.2	813																					
3 3 2	227.2	337																					
3 3 3	1436.9	1178																					
3 3 4	1060.0	1122																					
3 3 5	562.0	404																					
3 3 6	77.3	1																					
3 4 2	4.9	2																					
3 4 3	45.3	11																					
3 4 4	287.0	53																					
3 4 5	363.3	106																					
3 4 6	34.0	9																					
3 5 3	239.9	17																					
3 5 4	1313.9	146																					
3 5 5	884.8	45																					
3 5 6	24.6	0																					
3 6 2	9.4	0																					
3 6 3	129.4	12																					
3 6 4	392.5	56																					
3 6 5	693.2	62																					
3 6 6	1.9	0																					
3 7 7	5.0	0																					
3 7 3	51.6	18																					
3 7 4	216.3	4																					
3 7 5	987.0	16																					
3 8 2	74.1	4																					
3 8 3	34.6	5																					
3 8 4	12.8	1																					
3 8 5	320.1	0																					
3 9 2	28.1	0																					
3 9 3	183.4	0																					
3 9 4	83.4	1																					
3 9 5	85.2	6																					
3 10 3	597.8	0																					
3 10 4	6532.4	20																					
3 10 5	19.3	0																					
4 1 2	94.9	223																					
4 1 3	58.0	88																					
4 1 4	5.1	4																					
4 1 5	2.1	14																					
4 2 2	82.0	100																					
4 2 3	245.1	210																					
4 2 4	11.0	11																					
4 2 5	49.6	47																					
4 3 2	18.7	12																					
4 3 3	243.6	138																					
4 3 4	161.0	67																					
4 3 5	240.3	141																					
4 3 6	6.0	2																					
4 4 4	31.7	2																					
4 4 5	172.1	28																					
4 4 6	10.6	0																					
4 5 3	4.1	0																					
4 5 4	16.4	5																					
4 5 5	177.1	11																					
4 6 5	83.0	0																					
4 7 3	9.2	3																					
4 7 4	39.8	0																					
4 7 5	120.3	7																					
4 8 5	1371.1	6																					
4 9 4	98.6	0																					
4 9 5	3788.8	21																					
4 10 4	4466.1	5																					
4 10 5	48.7	0																					
5 1 2	21.9	64																					
5 1 3	37.4	109																					
5 2 3	18.8	47																					



TABLE B46 concluded  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
DOVER AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

W-WH-A BLOCK	NAUTICAL FILES	TOTAL PEAKS	USE DISTRIBUTION (FT./SEC.)																			
			-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15+17.5	+20	+25	+30+35			
5 2 4	1.6	0									2	4	2									
5 3 1	3.1	0																				
5 3 4	14.1	6									1	3	2									
5 3 5	135.8	38									8	27	3									
5 3 6	10.3	9									1	8										
5 4 4	6.8	0																				
5 4 5	118.4	5								1	4											
5 4 6	95.1	3										3										
5 5 5	120.6	7									2	4	1									
5 6 9	147.1	6										4	1									
5 7 5	194.7	29									14	12	3		1							
5 8 5	1018.8	15									7	8										
5 9 4	734.2	98								5	14	33	6									
5 9 5	4417.9	232						2	1	14	87	93	19		5		1					
5 10 4	3922.1	26								2	6	19	1									
5 10 5	23.7	0																				
TOTAL	52885.8	20017	0	1	7	24	54	148	348	897	2273	4464	5523	3575	1640	637	273	126	55	16	0	0

TABLE B47  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
DOVER AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

W-WH-A BLOCK	NAUTICAL FILES	TOTAL PEAKS	-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15+17.5	+20	+25	+30+35	
3 1 2	23.6	43							3	7	14	5	12	1	1					
3 1 9	11.0	25							1	1	8	11	2	2						
3 2 2	28.6	22						1	1	1	5	5	7	1	1					
3 2 3	93.9	43								2	13	20	8							
3 2 4	8.6	7									2	5								
3 3 1	41.5	19								2	6	6	3	1	1					
3 3 4	22.7	5						1			1	2			1					
3 3 5	12.8	4								1	2	2	2	1						
3 4 3	20.0	14							1	3	6	6								
3 4 4	7.7	0																		
3 4 5	18.5	24								3	8	8	4	1						
3 5 1	70.4	1										1								
3 5 4	56.2	2								1		1								
3 5 5	44.0	0																		
3 6 1	3.0	0																		
3 6 4	145.0	1																		
3 6 5	78.9	0													1					
3 7 4	94.4	0																		
3 7 5	50.5	0																		
3 8 5	144.8	0																		
3 9 4	17.4	2										2								
3 9 5	91.2	1									1									
3 10 4	20.9	8									3	5								
4 1 7	3.4	6							1	1	2		2							
4 1 9	5.0	3									1		1							
4 2 3	2.6	1										1								
4 2 4	1.2	0																		
4 3 3	1.6	0																		
4 3 4	12.7	1								1										
4 3 5	24.3	1										1								
4 3 6	1.1	0																		
4 4 4	25.4	3								1	2									
4 4 6	1.7	0																		
4 5 5	26.3	0																		
4 6 5	8.9	0																		
TOTAL	1219.5	242	0	0	0	0	0	0	3	6	24	74	82	41	7	5	0	0	0	0



TABLE 343  
DISTRIBUTION OF OBSERVED VERTICAL GUST VELOCITY  
FOR THE  
VINHOM AIR FORCE BASE  
LOGISTICS, RECONNAISSANCE DIVISION  
DATA SAMPLE

U-101-A BLOCK	NAUTICAL MILES	TOTAL PEAKS	-25	-20	-15	-10	-7.5	-5	-2.5	+2.5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30
2 1 2	7.7	0																	
2 2 2	9.7	10																	
2 2 3	3.2	0																	
2 3 2	47.9	21																	
2 3 3	64.0	21																	
2 3 4	9.7	0																	
2 3 5	6.7	0																	
2 4 4	16.0	1																	
2 4 5	27.3	1																	
2 5 4	14.0	0																	
2 5 5	55.0	1																	
2 6 4	18.5	1																	
2 6 5	79.6	4																	
2 6 6	3.5	0																	
2 7 4	10.4	3																	
2 7 5	41.7	13																	
2 7 6	3.5	0																	
2 8 5	448.5	1																	
2 9 4	20.0	0																	
2 9 5	7.2	0																	
2 10 4	302.7	0																	
3 1 2	30.1	48																	
3 1 3	1.5	0																	
3 2 2	76.0	100																	
3 2 3	20.0	11																	
3 2 4	3.9	0																	
3 3 2	119.3	120																	
3 3 3	100.9	103																	
3 3 4	191.6	57																	
3 3 5	33.0	10																	
3 4 2	12.1	29																	
3 4 3	0.6	3																	
3 4 4	129.1	12																	
3 4 5	166.0	6																	
3 5 4	10.7	9																	
3 5 5	304.5	9																	
3 5 6	12.2	0																	
3 6 1	222.0	0																	
3 6 6	13.2	0																	
3 7 5	1351.7	2																	
3 7 6	10.0	0																	
3 8 1	1400.4	1																	
3 9 4	1114.0	2																	
3 9 5	4020.6	23																	
3 10 4	3264.3	0																	
4 1 2	18.3	44																	
4 1 3	0.0	16																	
4 1 4	2.3	6																	
4 1 5	0.4	0																	
4 2 2	40.2	49																	
4 2 3	12.1	23																	
4 2 5	6.1	2																	
4 3 2	22.1	29																	
4 3 3	80.0	43																	
4 3 4	81.5	29																	
4 3 5	42.0	3																	
4 4 1	23.6	7																	
4 4 4	52.1	9																	
4 4 5	197.2	17																	
4 5 4	79.9	2																	
4 5 5	253.1	5																	
4 6 4	5.0	0																	
4 6 5	246.0	0																	
4 7 4	17.2	0																	
4 7 5	1623.0	24																	
4 8 4	3.0	0																	
4 8 5	1054.3	0																	
4 9 4	3221.0	50																	
4 9 5	4051.7	46																	
4 10 4	2094.5	33																	
5 1 3	1.6	6																	
5 2 2	1.1	0																	
5 2 3	1.1	3																	
5 3 1	2.3	4																	
5 3 4	1.6	7																	
5 3 5	1.4	1																	
5 4 5	24.3	1																	
5 5 5	25.4	0																	
5 6 5	33.3	0																	
5 7 5	40.9	0																	
5 8 5	62.7	1																	
5 9 4	1241.3	123																	
5 9 5	866.9	31																	
5 10 4	2720.5	56																	
6 1 2	2.4	0																	
6 1 3	9.5	12																	
6 2 3	6.0	4																	
6 2 4	0.7	1																	
6 3 3	1.3	0																	
6 3 4	0.6	0																	
6 3 5	19.9	0																	
6 3 6	2.7	0																	
6 4 4	0.5	0																	
6 4 5	10.2	0																	
6 5 5	25.2	0																	
6 6 5	35.0	0																	
6 7 5	42.2	0																	
6 8 5	53.2	0																	
6 9 4	183.0	2																	
6 9 5	769.9	3																	
TOTAL	33492.3	1297	0	0	0	0	0	0	29	109	304	573	234	35	10	0	0	0	0



TABLE B49  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
TINKER AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

N-NO-2 BLOCK	NAUTICAL PILTS	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																		
			-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30+35
2 1 1	44.2	4									1	1	1	1	1	1	1	1			
2 1 2	814.8	1960				3	4	9	32	101	239	420	475	391	179	64	24	14	5		
2 1 3	136.2	499				1	1		7	16	41	118	140	100	50	18	4	2	1		
2 1 4	17.6	60									6	10	17	18	4	3	2				
2 2 1	134.1	79						2	4	7	7	14	6	21	10	6	1			1	
2 2 2	9990.2	12155	1		9	18	42	165	505	1438	4955	3502	2182	874	311	95	37	17	3	1	
2 2 3	1642.5	3339			2	6	16	35	125	367	863	1091	541	197	63	21	7	4			
2 2 4	105.4	298						2		7	21	56	104	52	10	5	1				
2 2 5	8.4	10								1	1	2	4	1							
2 3 1	24.6	40								1	6	5	15	10	2	1					
2 3 2	15970.2	26040			3	12	74	96	249	974	2943	6872	8350	4195	1492	498	162	49	27	4	
2 3 3	10497.3	15210			1	8	16	53	145	473	1624	4201	5100	2351	839	263	99	22	13	2	
2 3 4	4517.1	5864			1	5	7	14	51	160	506	1597	2176	869	304	112	43	15	3		
2 3 5	910.7	868					1	2	12	29	67	202	334	128	52	19	14	4	4		
2 3 6	43.8	21									4	4	9	1	1	1	1				
2 4 2	315.8	610					1	2	3	12	30	78	161	174	104	37	8	4	3	1	
2 4 3	1314.4	854					1	1	9	21	36	95	209	280	115	56	21	4	2	4	
2 4 4	2863.4	1426					1	1	2	7	10	37	114	425	562	174	60	27	6	4	1
2 4 5	4224.2	1333						3	5	12	32	117	385	511	168	58	30	5	4	3	1
2 4 6	345.1	50									2	3	18	24	3						
2 4 7	1.2	2																			
2 5 2	435.5	4									2		2								
2 5 3	475.0	33								1	2	10	14	1							
2 5 4	2740.4	372					1	1	3	7	28	144	147	27	10	2	1	1			
2 5 5	4510.3	325							1	2	26	121	129	23	10	1					
2 5 6	416.1	22			1					1	2	8	7	2					1		
2 6 2	75.2	16									1	3	5	1							
2 6 3	1241.2	71									3	25	37	3	2	1					
2 6 4	5847.4	347							2	3	25	141	149	24	2	1					
2 6 5	6226.2	490							2	4	28	184	194	54	11	8	3	1	1		
2 6 6	245.8	8										5	3								
2 7 2	89.9	2										1	1								
2 7 3	2053.4	107								3	7	39	50	5	1	2					
2 7 4	5882.4	349						1	1	9	19	117	162	25	12	1	1		1		
2 7 5	9210.3	334								3	22	111	170	27	1						
2 7 6	427.6	3										2	1								
2 8 4	9.0	3																			
2 8 5	1038.0	14								2		6	4								
2 9 3	27.4	3											2								
2 9 4	151.3	4										1	1								
2 9 5	171.0	10										2	5								
2 10 3	149.7	6									1	2	3								
2 10 4	92.5	12									2	5	4								
3 1 1	24.3	14									2		3								
3 1 2	1733.2	4465			3	5	16	27	83	731	604	845	1004	924	415	216	48	30	16	1	
3 1 3	587.2	1270						6	10	39	160	299	318	229	99	40	8	8	2		
3 1 4	8.4	24										7	4								
3 2 1	60.2	61									11	4	4	12	11	4					
3 2 2	10495.7	22230	1		2	20	39	119	349	1061	2942	4861	5765	4198	1863	668	214	78	40	10	
3 2 3	5049.2	9606			1	6	5	37	103	345	1121	2537	2967	1601	597	194	61	15	13	3	
3 2 4	324.7	152					1		4	12	42	120	191	91	21	16	2	1			
3 2 5	134.2	43								1	3	8	19	7	3	1					
3 3 1	15.0	14								1	5	2	2	3	2	1					
3 3 2	20699.5	36156			2	25	56	146	486	1509	4388	6255	9454	6028	2300	723	213	85	30	5	1
3 3 3	29326.4	40857			2	17	51	128	436	1377	4545	10943	13355	6532	2408	698	254	89	42	4	1
3 3 4	10573.5	12749			1	2	12	9	50	129	368	1125	3439	4687	1836	677	280	70	28	13	3
3 3 5	1878.6	2104					1	3	7	24	62	150	506	813	344	120	51	14	5	4	
3 3 6	28.3	20									3	7	7	1	2						
3 4 2	232.0	734					1		2	4	31	91	187	189	150	44	23	5	3	2	
3 4 3	2248.0	1064					1	3	6	13	71	213	555	666	339	130	42	18	4	2	
3 4 4	4817.4	1135						4	14	27	78	251	871	1177	444	152	68	30	10	8	
3 4 5	6633.7	1067			1		1	2	5	23	41	154	580	719	227	78	29	7	2	1	
3 4 6	281.8	13									1	5	7								
3 4 7	2.6	2																			
3 5 2	444.0	44										23	18	3							
3 5 3	1873.6	79			1				1	3	2	29	35	7	1						
3 5 4	5731.6	821					2		3	12	51	274	403	62	13	4					
3 5 5	8247.9	845						4	2	23	77	254	356	84	23	13	5	1	3		
3 5 6	272.0	10									1	4	4	1							
3 5 7	1.4	6																			
3 6 2	403.0	25									4	9	10	1	1						
3 6 3	4312.0	192								1	11	69	90	16	3	2					
3 6 4	15674.8	1311			1	3		4	6	21	87	452	562	122	37	9		3			
3 6 5	18933.2	830					1		3	10	44	316	378	64	7	6	1				
3 6 6	646.9	26										13	11	2							
3 7 2	951.4	23									2	6	13	2							
3 7 3	9616.1	450								3	15	166	227	34	2	1					
3 7 4	32149.5	1252				1		1	3	9	55	463	621	81	10	6	2				
3 7 5	27517.0	771						3		8	31	288	386	41	9	2	3				
3 7 6	608.1	20								1	2	8	5	4							
3 8 2	0.3	2																			
3 8 3	331.5	14								1		6	7	2							
3 8 4	445.9	49								1	4	15	18	7	3		1				
3 8 5	2617.4	194			1			1	1	5	18	61	82	11	8	5				1	
3 8 6	2.3	1										1									
3 9 2	4.1	0																			
3 9 3	1699.4	75										25	43	3							
3 9 4	2030.1	131								1	2	5	18	29	12	6	4	3	2		
3 9 5	812.5	19										3	2	11	1						
3 10 3	1129.2	3										2									
3 10 4	2942.7	117								1											



TABLE B49 continued  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
TINIAN AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

W-M-D	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	0	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35			
4 2 5	4.2	0																				
4 3 1	0.1	0																				
4 3 2	3723.9	9032				0	0	23	75	200	933	1536	1776	1604	1011	940	200	134	40	20	1	
4 3 3	19101.9	27020	1	2	30	90	164	444	1303	3590	6377	6902	8043	2500	870	299	93	41	2			
4 3 4	5791.4	6493				6	5	23	81	223	677	1634	2024	1132	429	171	99	12	13	2		
4 3 7	791.3	930				2	1	4	4	14	26	129	213	91	24	18	3	1	1			
4 3 8	19.4	12									1	4	0	1								
4 4 2	161.7	337									1	4	0	1								
4 4 3	3691.2	4690									1	4	0	1								
4 4 4	2408.6	2318									1	4	0	1								
4 4 5	1752.7	873	1								1	4	0	1								
4 4 6	99.4	10									1	4	0	1								
4 5 2	43.7	1									1	11	12	2								
4 5 3	626.2	27									1	1	11	12	2							
4 5 4	1394.7	129									2	11	40	61	11	4						
4 5 7	4212.3	443									2	29	139	106	39	10	9			1		
4 5 8	21.4	0																				
4 6 2	20.8	0																				
4 6 3	763.3	17										0	7									
4 6 4	3269.8	249										0	101	20	7	2	1					
4 6 5	6610.3	303										110	153	14	1	1						
4 6 6	116.4	3										1	1	1								
4 7 2	70.0	0																				
4 7 3	1722.8	37										15	10	4								
4 7 4	6627.3	297										19	74	129	22	4	1			1		
4 7 5	10647.7	498										31	151	291	47	10	1			1		
4 7 6	163.2	16										2	6	6								
4 8 1	1.1	0																				
4 8 3	10.6	0																				
4 8 4	43.8	0																				
4 8 5	752.3	1											3	0								
4 8 6	22.8	0																				
4 9 3	186.6	15										2		10	2		1					
4 9 4	266.0	09										0	27	39	9	4						
4 9 5	189.1	7										4			3							
4 10 3	17.5	0																				
4 10 4	303.3	1												1								
4 10 5	150.4	0																				
5 1 2	72.0	235																				
5 1 3	33.5	84																				
5 2 1	1.5	0																				
5 2 2	292.1	611																				
5 2 3	486.4	1061																				
5 2 4	25.0	24																				
5 2 5	2.3	0																				
5 3 1	0.8	0																				
5 3 2	289.8	456																				
5 3 3	2175.6	2743																				
5 3 4	1329.9	747																				
5 3 5	375.6	231																				
5 3 6	2.7	7																				
5 4 7	8.0	10																				
5 4 3	264.2	335																				
5 4 4	568.4	147																				
5 4 5	1589.2	264																				
5 4 6	26.4	7																				
5 5 2	1.7	1																				
5 5 3	140.7	19																				
5 5 4	199.1	82																				
5 5 5	2152.7	218																				
5 5 6	34.9	2																				
5 6 2	14.1	0																				
5 6 3	473.4	7																				
5 6 4	2625.9	205																				
5 6 5	3919.2	199																				
5 6 6	35.6	3																				
5 7 2	47.3	0																				
5 7 3	1352.1	51																				
5 7 4	6084.4	243																				
5 7 5	6627.1	396																				
5 7 6	187.3	5																				
5 8 3	171.7	0																				
5 8 4	148.6	5																				
5 8 5	707.2	12																				
5 9 1	260.5	9																				
5 9 4	241.5	6																				
5 9 5	463.3	3																				
5 10 3	95.0	1																				
5 10 4	922.7	3																				
TOTAL	441513.0	294190	1	6	36	220	431	1316	3834	11781	34127	73301	80390	49756	20676	7226	2375	857	400	49	9	1



TABLE R40  
DISTRIBUTION OF DESIRED VERTICAL GUST VELOCITY  
FOR THE  
TERRON AND FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

U-28-A BLOCK	MOONICAL PILOTS	TOTAL PEAKS	-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	-2.5	+2.5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35
3 2 2	11.7	37							2	5	10	7	6	7			2				
3 2 3	1.4	8								2	1	2	6	9							
3 3 2	24.6	67				1				5	21	23	9	7							
3 3 3	124.1	124					2	1	6	10	36	27	20	11	2			1			
3 3 4	17.2	0																			
3 4 3	17.3	0																			
3 4 4	90.7	3											3								
3 4 5	40.8	5								1	2	1	1								
3 5 4	40.9	1											1								
3 5 5	71.1	0																			
3 6 4	2.3	0																			
3 6 5	20.4	0																			
3 7 3	20.4	0																			
3 7 4	95.9	0																			
3 7 5	120.4	1													1						
3 7 6	1.7	0																			
3 8 4	27.5	0																			
3 8 5	19.7	0																			
3 9 4	42.7	0																			
3 9 5	2.2	0																			
3 10 4	902.6	3									1	2	2	1							
4 2 2	1.1	1								1		1	2	1							
4 2 3	1.1	1																			
4 3 3	4.0	0																			
4 3 4	2.7	0																			
4 4 3	16.1	0																			
4 4 4	0.4	0																			
4 4 5	22.9	2										1	1	1							
4 5 4	10.0	3										1	1	1							
4 5 5	75.0	0																			
4 6 4	12.0	0																			
4 7 3	2.3	0																			
TOTAL	1247.0	299	0	0	0	0	1	2	2	10	25	72	70	47	25	4	0	1	0	0	0



LOGISTICS, MOTOR BARGE MISSION  
DATA SAMPLE

194



TRAVIS AIR FORCE BASE  
LOGISTICS, MOTION PICTURE DIVISION  
REF: 149411

0 1 3 11 79 90 190 492 1439 4041 7049 2345 604 200 91 45 19 5 3 0



TABLE 201  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
TRAVIS AIR FORCE BASE  
LOGISTICS, LONG RANGE DIVISION  
DATA SAMPLE

WIND-0 BLOCK	GAUSSIEN FILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
			-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35				
2 1 2	4.2	2																				
2 2 2	10.0	2							1	2	1											
2 2 3	4.0	0																				
2 2 4	2.0	2																				
2 3 2	2.5	0																				
2 3 3	1.0	0																				
2 3 4	24.4	1								1												
2 4 4	10.1	0																				
2 4 5	10.0	1								1												
2 5 4	2.0	0																				
2 5 5	10.0	2											2									
2 6 5	12.0	0																				
2 7 5	12.0	0																				
2 8 5	13.0	0																				
2 9 4	7.0	0																				
2 9 5	7.2	0																				
2 10 4	7.1	0																				
3 1 2	157.4	172							7	14	40	93	22	12	4							
3 1 3	5.2	1								2	1	1										
3 2 2	276.4	61							2	13	22	27	13	4	1							
3 2 3	90.0	17							1	1	4	7	1	1								
3 2 4	30.1	4									2	3	1									
3 3 2	110.7	24							1	3	6	11	4	2	1							
3 3 3	170.7	61								5	20	26	6	1	1							
3 3 4	162.1	27							1	1	7	12	9		1							
3 3 5	87.4	4										3	1									
3 4 2	12.0	0																				
3 4 3	73.2	5									3	2										
3 4 4	179.1	27							1	14	10	2										
3 4 5	276.2	7									4	1	1									
3 5 2	4.1	1										1										
3 5 3	10.5	3										1										
3 5 4	100.0	0										2	1									
3 5 5	150.0	15							1	3	9	2										
3 6 5	6.2	0																				
3 6 2	6.1	0																				
3 6 3	34.3	0																				
3 6 4	40.4	1																				
3 6 5	613.0	4										1										
3 7 3	15.4	0										3	1									
3 7 4	51.3	0																				
3 7 5	719.4	0																				
3 8 3	20.0	0																				
3 8 4	63.0	0																				
3 8 5	434.9	2											2									
3 9 4	4299.1	3										3										
3 9 5	2572.1	1										1										
3 10 4	27003.1	66							2		27	34	3									
4 0 4	5000.0	31								1	13	16	1									
4 0 5	3433.0	0																				
4 10 3	164.7	0																				
4 10 4	92866.7	274				1	1	6	0	79	116	13			1							
5 0 2	3.1	0																				
5 0 3	55.0	0																				
5 0 5	175.3	0																				
5 0 4	9656.0	109			1					0	35	40	10	2	2	2	1					
5 0 5	11455.3	36								3	8	21	2	1	1							
5 10 4	41021.9	339			1		2	1	16	113	174	20	3	1								
5 10 5	271.4	0																				
6 1 2	29.4	40																				
6 1 3	70.0	99																				
6 1 4	5.0	11																				
6 1 5	0.5	3																				
6 2 3	33.4	43																				
6 2 4	20.9	14																				
6 2 5	17.0	10																				
6 3 3	20.2	12																				
6 3 4	76.4	42																				
6 3 5	293.0	110																				
6 3 6	1.1	0																				
6 4 4	0.5	0																				
6 4 5	514.9	137																				
6 4 6	7.9	0																				
6 5 5	403.0	17																				
6 5 6	5.0	0																				
6 6 4	5.4	0																				
6 6 5	965.0	64																				
6 7 5	1169.2	18																				
6 8 4	0.9	0																				
6 8 5	1093.6	34																				
6 9 4	2003.4	203																				
6 9 5	5354.0	199																				
6 10 4	4023.3	17																				
6 10 5	220.3	4																				
TOTAL	101950.4	2309	0	0	0	0	2	4	20	52	173	709	1040	254	86	30	7	1	1	0	0	0



TABLE 883  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE  
TRAVIS AIR FORCE BASE  
TRAINING MISSION  
DATA SAMPLE

BLOCK	NAUTICAL FILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																		
			-35	-30	-25	-20-17.5	-15	-12.5	-10	-7.5	-5	-2.5	+2.5	+5	+7.5	+10	+12.5	+15-17.5	+20	+25	+30-35
2 1 1	3.0	0																			
2 1 2	317.4	394						2	2	20	59	83	94	80	30	13	3				
2 1 3	40.9	76								3	10	22	23	19	3						
2 1 4	0.7	0																			
2 2 2	551.0	303						3	1	11	49	91	145	59	19	7	1	1			
2 2 3	213.0	161								4	11	53	66	21	9	1					
2 2 4	8.4	4										3	1								
2 3 2	230.4	94								3	10	36	30	14	1						
2 3 3	496.3	103						1		2	6	30	43	12		1					
2 3 4	411.0	35								3	4	9	10	7	2						
2 3 5	70.4	17									3	3	9	2							
2 4 2	4.9	0																			
2 4 3	7.2	4										3	1								
2 4 4	39.7	11								1	2	6	2								
2 4 5	12.9	0																			
2 4 6	1.2	0																			
2 5 3	1.0	0																			
2 5 4	30.2	7										3	4								
2 5 5	15.4	0																			
2 6 3	6.5	0																			
2 6 4	51.2	11										6	4		1						
2 6 5	22.9	0																			
2 7 3	47.7	6										1	5								
2 7 4	149.0	1											1								
2 7 5	10.4	0																			
3 1 1	7.2	1													1						
3 1 2	1379.4	1848			1	3	3	5	25	99	246	343	489	346	209	55	25	7		1	1
3 1 3	308.4	428						2	2	9	57	136	141	84	23	3					
3 1 4	86.1	277							1	8	17	71	110	41	11	3	1	1			
3 1 5	50.1	105								1	2	7	30	46	16	2	1				
3 2 2	2174.1	1283					1	3	29	59	166	278	400	241	80	29	4	2			
3 2 3	1346.4	1169					1	1	17	52	139	305	374	201	66	22	7	2	2		
3 2 4	223.4	169							1	0	10	43	68	15	11	1	1	3			
3 2 5	40.9	25									2	10	9	2	2						
3 3 2	977.4	359							2	9	35	102	127	52	14	0					
3 3 3	3810.4	936				1	2	1	5	16	102	265	353	132	32	0	5	2	2		
3 3 4	3780.1	730						2	4	14	54	240	287	88	27	0	1	1	2		
3 3 5	1087.1	194							1	10	15	67	69	22	9	3					
3 3 6	6.9	1											1								
3 4 2	19.2	0																			
3 4 3	492.4	23									1	7	12	3							
3 4 4	1969.5	139									0	51	59	11							
3 4 5	1309.3	94								1	2	6	34	42	6	2	1				
3 4 6	18.2	1											1								
3 5 2	99.4	6										1	2	3							
3 5 3	313.2	10										1	2	7							
3 5 4	1699.4	67					1					5	24	32	5						
3 5 5	1712.9	67									2	2	35	23	3	2					
3 5 6	16.9	0																			
3 6 2	52.1	0																			
3 6 3	593.8	4										2	4								
3 6 4	2559.0	122							1	2	7	59	46	4	1	1	1				
3 6 5	1710.1	33								1	2	14	12	4							
3 6 6	48.3	0																			
3 7 2	1.1	0																			
3 7 3	5317.7	32											11	17	3	1					
3 7 4	2676.0	104										4	27	60	10	3	1				
3 7 5	799.4	10				1							5	5							
3 8 3	5.7	1																			
3 8 4	75.1	0																			
3 8 5	91.2	2												2							
3 9 4	79.4	2																			
3 9 5	91.7.3	24											15	6	3						
3 10 3	150.6	0																			
3 10 4	410.7	7											4	3							
4 1 2	99.0	146							1	4	12	14	15	15	32	25	16	6	1	1	
4 1 3	49.1	112							3	3	12	15	18	19	22	17	3				
4 1 4	9.2	8											3	5							
4 1 5	0.9	0																			
4 2 2	45.4	32										2	9	4	5	2	2	1	1		
4 2 3	121.6	127									10	23	28	29	14	10	4	3	1		
4 2 4	44.8	19										6	5	5	2	1					
4 2 5	48.6	6										1	1	3	1						
4 3 2	77.2	8										1	2	1	3	1					
4 3 3	233.7	48										2	9	10	17	5	1				
4 3 4	548.7	68										2	4	21	29	10					
4 3 5	569.1	123										3	9	41	47	12	4	4	2	2	
4 3 6	11.3	9										1	1	1	4	1					
4 4 3	37.2	2																			
4 4 4	433.6	4										1	1	2							
4 4 5	571.4	23										3	9	9	2						
4 4 6	10.3	0																			
4 5 3	8.0	0																			
4 5 4	79.2	1																			
4 5 5	226.7	4												1							
4 6 2	77.0	1											3	1							
4 6 3	40.7	4												1							
4 6 4	60.9	8											3	1							
4 6 5	60.9	8												1							
4 6 6	230.6	15											4	4							
4 7 3	25.1	3											5	6	1	3					
4 7 4	47.2	1																			
4 7 5	213.1																				



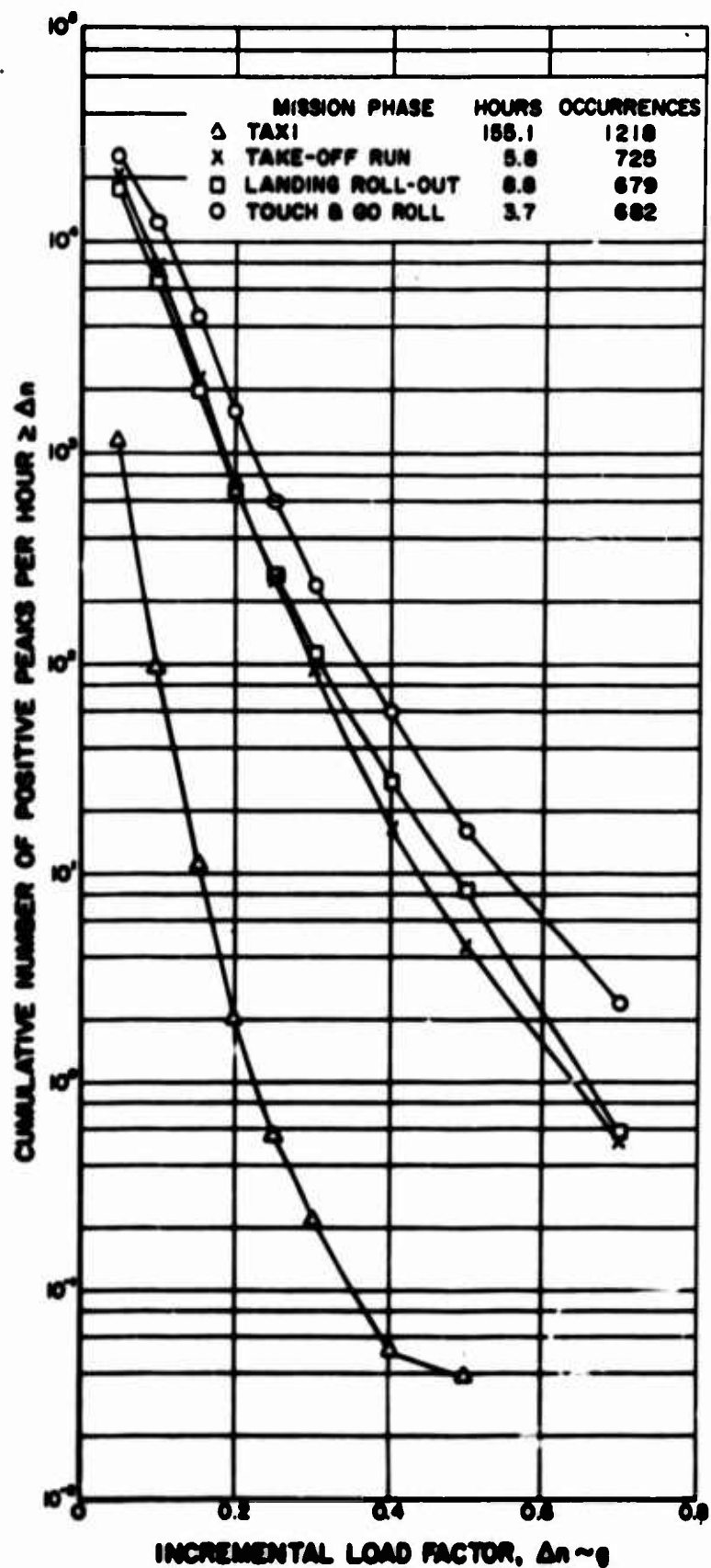
TABLE B44  
DISTRIBUTION OF SORTED VERTICAL GUST VELOCITY  
FOR THE  
TRAVIS AIR FORCE BASE  
FLIGHT TEST MISSION  
DATA SAMPLE

[illegible]



**APPENDIX C**  
**GROUND LOADS STUDY DATA**





**Figure C1. Cumulative Frequency of Positive Incremental Ground Load Factor Peaks for the Mission Phases of Taxi, Take-off Run, Landing Roll-out, and Touch-and-Go Roll**



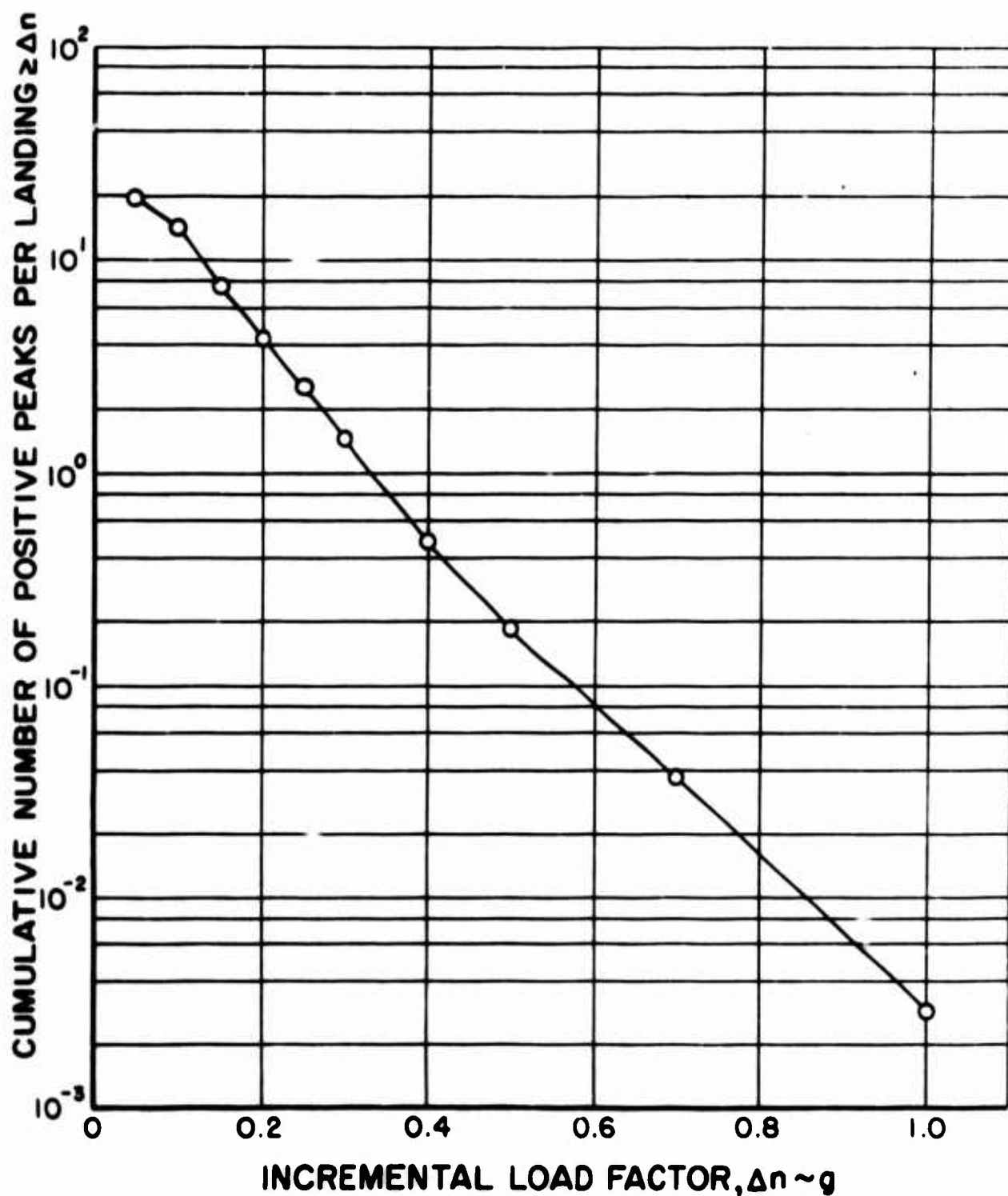


Figure C2. Cumulative Frequency of Positive Incremental Ground Load Factor Peaks per Landing for the Landing Impact Mission Phase



TABLE C1  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE

CU-PM BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																					
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1	1	33.73					1	1	0	24	122	631	907	140	46	9	3	2						
1	2	204.76							5	19	243	3270	3092	223	40	10								
1	3	799.14					1	5	17	126	1316	13030	10794	1473	130	21	3	7						
1	4	899.93					3	6	21	115	1368	15209	10790	2212	257	36	8	2						
1	5	910.87						1	0	90	1276	17391	22077	1614	137	7		1						
1	6	1004.87						1	10	106	2147	27799	34844	2336	199	27	4	2				1		
1	7	906.87						2	15	103	1171	14333	17003	1340	103	8	2							
1	8	906.66							12	189	4094	4404	214	16	3	1								
1	9	47.82								1	16	439	649	66										
1	10	740.21					3	5	31	131	1042	9863	13022	1071	122	30	7	2		1	2			
2	2	11.49									6	33	52	4										
2	3	140.88							1	4	10	60	823	1371	70	8	1	1	2		1			
2	4	100.86									12	305	503	47	3				1					
2	5	89.34									47	760	962	16	1									
2	6	23.13									2	252	330	11										
2	7	23.01									6	297	287	9										
2	8	81.94								2	6	53	931	1403	80	6	1							
2	9	97.12				1					8	70	437	469	39	3	1							
2	10	242.89							1	4	41	432	2346	2937	332	34	7	2						
3	2	62.43								1	25	163	490	525	79	11	1							
3	3	133.33								1	9	196	1142	1394	190	26	4							
3	4	144.36									6	40	759	812	24	1								
3	5	37.93								1	5	72	437	651	62	5								
3	6	107.62			1						2	13	593	809	11	1								
3	7	5.13									2	19	21											
3	8	73.50									8	75	630	805	102	11	4							
3	9	77.76									5	64	937	1204	89	10								
3	10	300.92							1	6	37	324	2606	2974	303	27	9	1						
4	3	90.93									1	0	104	823	879	74	4							
4	4	74.37											27	473	565	18								
4	5	14.00											1	4	3									
4	6	33.31										1	90	130	3									
4	7	9.79											41	36	1									
4	8	53.37									6	34	207	1407	1639	244	29	4						
4	9	82.51											35	641	540	25								
4	10	162.15									7	24	145	1420	1791	333	88	26	3	3		1		
5	2	22.74											5	15										
5	3	70.86									1	32	476	430	12	1								
5	4	90.11									1	25	426	476	11	2								
5	5	15.84					1	1	2	1	2	2	22	29	2	1		1	1	1				
5	6	18.61									1	2		60	31	1								
5	7	8.44											4	173	102	4								
5	8	57.84										31	423	399	3	1								
5	9	111.42										35	500	664	39	2								
5	10	143.42									3	31	176	1210	1530	175	50	17	10	3				
6	9	13.01										1	770	313	32									
6	9	7.31										6	150	130	4									
7	3	13.89										10	51	62	6									
7	4	47.20										15	162	320	11									
7	5	4.27											26	23										
7	6	10.59											5	114	25									
7	7	3.49												33	96									
7	8	20.64										1	45	400	354	75	3							
7	9	16.30												110	175									
TOTAL		9204.99				1		1	1	14	29	199	1066	11509	130261	166370	13252	1399	220	32	26	2	6	

TABLE C2  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE

CU-PM BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																					
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0		
1	2	1.44	699						2	13	39	234	296	94	25	2	1							
1	3	11.70	6991				3	14	9	54	210	622	2164	2512	911	209	59	26	4					
1	4	22.11	13730				4	10	7	42	274	1131	4750	3205	1754	394	66	27	15					
1	5	32.11	19675					17	27	103	400	1066	6357	7600	2945	567	123	20	5					
1	6	50.15	33771		1	5	4	61	96	214	890	3459	10630	12073	4402	1237	303	97	50	5	2			
1	7	22.54	13444					3	14	31	121	412	1495	6113	4721	1900	509	104	31	16	4			
1	8	20.64	10006					1	6	31	40	156	611	1191	3272	3626	1411	431	134	60	29	1		
1	9	4.63	2027							7	15	0	277	995	775	339	60	24	9	4				
1	10	45.39	21074		3	1	7	35	6	230	904	3490	9133	10449	4633	1196	319	82	26	11	4	2		
2	3	0.64	105						1		3	23	135	165	67	7	2							
2	4	0.39	267							2	13	27	64	60	35	2	1							
2	5	0.07	670					1			16	50	223	232	97	31	3							
2	7	1.75	1629					1	15	27	33	35	305	309	440	181	134	64	30	5	1	1		
2	8	6.30	3094						6	17	42	173	475	1050	1293	614	177	51	23	0	2	1		
2	9	4.31	2063						1	6	13	34	116	329	929	601	346	91	29	10	4	2		
2	10	23.50	14044					1	14	60	180	299	732	1931	3647	3400	2130	797	320	120	74	14	2	1
3	5	1.52	913							6	14	43	62	200	121	234	147	84	25	5	0	2		
3	6	2.27	1382						1	1	2	1	10	107	494	582	163	15	5	1				
3	7	0.47	207									6	96	114	69	11	1							
3	8	5.20	4162					1	3	19	30	62	139	672	1187	1296	435	212	73	25	14	3	1	
3	9	0.37	6601						3	19	31	70	199	967	1310	1460	665	229	79	43	17	3	7	
3	10	23.23	13797					1	9	32	99	260	702	2366	4224	4932	2477	795	235	70	33	2		
4	6	0.04	624						1		3	0	19	212	211	113	32	2	1					
4	8	0.64	2590						2	4	35	110	417	591	731	406	157	22	0	2	2	1		
4	9	4.71	3331					3	2	5	11	34	110	423	914	971	590	159	53	17	6	3	1	
4	10	10.79	7581							9	20	100	381	1155	2007	2409	1190	400	101	32	10	2		
5	6	0.33	930						1	5	25	34	63	72	110	64	64	34	19	2				
5	7	0.62	331								3	30	67	151	137	80	17	4						
5	8	0.90	4400						1	17	34	73	190	954	1210	1362	432	199	54	20	16	2	2	
5	9	0.02	6070						1	3	6	26	99	226	500	1596	1790	779	100	54	24	7	2	
5	10	0.41	6995					2	4	17	20	73	207	683	2091	2231	1084	301	63	22	10	2	1	
6	7	0.42	302								3	46	112	136	60	22	1							
6	9	0.71	737						1	1	9	19	96	99	210	304	105	27	17	6	7			
7	4	0.37	350									12	73	66	132	50	4	1						
7	5	0.62	545								6	23	104	111	204	60	15							
7	9	0.90	608								3	60	87	160	70	50	21	0	5	1				
7	10	2.75	2403					2	4	0	16	56	191	302	674	643	420	124	49	10	7			
7	9	1.20	1105						3	9	14	20	160	167	209	300	177	60	41	20	10	1		
TOTAL		346.09	229793	0	5	27	90	451	839	2439	7751	25023	64639	75460	31977	9996	2612	603	461	60	23	3		



TABLE C3  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 1	1.00	904					1	5	8	14	33	345	336	104	30	14	3	1				
1 2	22.54	9378					2	4	20	49	267	1142	3103	3279	1049	206	70	22	12	7		
1 3	70.04	34873	3	4	10	31	75	367	1009	3061	11999	13221	4606	1390	356	197	116	22	7	1		
1 4	94.06	32502		6	8	68	134	441	1568	6124	16736	17647	7007	2099	574	109	100	17	4			
1 5	70.00	49172		4	21	89	189	592	1767	9080	14440	16119	6879	2077	620	235	160	48	23	1		
1 6	66.06	46133		1	4	80	175	516	1707	7300	14311	14400	6090	2064	606	261	129	13	7	1		
1 7	20.06	10946					22	89	492	1990	5243	6230	2172	470	149	57	10	2				
1 8	0.06	867					2	12	60	132	171	202	167	72	32	6	4					
1 9	1.22	1062					2	14	46	126	200	263	219	92	20	4						
2 2	1.72	644		1			1	13	27	80	149	200	110	46	13	6	4	3	1			
2 3	20.32	6804	1	4	7	13	22	41	106	340	2199	2707	645	191	66	24	20	7	1			
2 4	10.20	6443				3	5	45	124	610	2043	2015	1130	370	101	24	8	1				
2 5	0.64	4293				3	8	31	71	197	909	1311	1401	472	140	62	32	14	3	1		
2 6	1.41	1309		1	8	43	20	47	131	299	294	397	225	80	33	16	5	2				
2 8	1.47	502					5	6	16	71	162	166	93	15	4	3	1					
3 2	5.48	1548				1	10	8	30	77	230	499	507	163	34	19	5	4	1			
3 3	19.01	6246				4	20	35	64	244	743	1040	2074	607	234	82	31	20	11	5		
3 4	21.76	17537				1	25	54	160	410	1434	4044	4449	1344	393	134	42	20	5	6		
3 5	2.04	1791	1	9	6	40	22	75	122	342	290	393	267	107	60	28	17	4	5	1		
3 6	5.24	3063				1	5	17	54	260	1094	1041	349	83	13	1	3					
3 7	0.66	471					1	5	12	65	117	146	80	19	6							
3 9	0.90	374					2	1	1	14	94	219	107	46	5	1						
3 10	0.91	322								3	25	136	43	82	11	2						
4 3	11.74	5099				2	5	10	47	105	652	1962	1700	640	211	70	32	12	2			
4 4	0.24	4710				2	9	9	42	141	600	1408	1497	739	160	39	11	6	1			
4 5	2.36	1254						3	11	95	200	302	409	157	24	10	9					
4 6	1.77	443								5	39	164	100	45	3	1						
4 7	2.12	873						1	6	31	149	299	162	139	43	12	9	1	1			
5 2	1.97	960							3	25	85	303	396	121	24	3						
5 3	0.66	4793					5	13	52	193	499	1390	1300	642	270	77	21	4				
5 4	10.73	6256		6	2	19	34	70	272	906	1020	1054	883	243	73	32	13	7	2			
5 5	2.74	1793				1	2	7	13	146	632	722	200	21	3	2	2					
5 6	2.20	1547				1	5	26	77	230	466	521	120	40	8	3	7	1	1			
5 9	0.94	391								5	126	104	16	1	1							
6 4	0.49	273								21	66	131	47	6	1	1						
6 7	0.69	705				2	6	16	39	60	84	120	149	86	77	30	10	13	5			
7 3	1.39	801	1	3	9	19	9	27	40	163	122	210	116	32	19	8	4	9	2			
7 4	5.42	3269				4	8	20	109	344	933	944	606	212	75	16						
7 5	1.01	716					4	4	17	82	202	233	64	23	1	2	1	1				
7 6	0.83	854				2	1	17	47	195	226	242	92	22	6	1	3					
TOTAL	206.01	275133	6	39	92	544	957	3004	9700	34732	98062	90599	39033	11962	3540	1340	730	160	47	3		

TABLE C4  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TACH-AND-ON ROLL MISSION PHASE

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 1	0.45	221						1		13	34	69	37	46	15	4		1					
1 2	3.46	2242						2	5	43	193	324	599	526	392	166	66	16					
1 3	23.09	10991						102	373	1042	2940	4003	3012	2746	1262	501	196	101	22	5			
1 4	30.10	31720	1	13	73	122	311	495	962	1972	4205	6745	6313	5200	2377	1274	303	401	114	40			
1 5	30.04	23490				7	13	87	165	409	1203	3034	6290	4027	3740	1993	505	199	65	12	1		
1 6	12.16	9907		1	1	4	40	90	224	590	1405	2395	2146	1634	720	230	84	21	3	1			
1 7	20.02	22077						15	62	227	841	2070	6099	7002	3470	1000	247	60	25	4	4		
1 8	45.73	34087				4	7	60	127	316	1501	3024	10091	11321	5911	1740	300	94	40				
1 9	40.93	33640				3	6	26	60	230	1182	4190	9002	11000	5407	1456	316	60	19	1			
1 10	1.72	1849					1	6	27	136	276	300	377	200	99	37	10	1					
2 3	0.70	626						1	16	29	50	103	164	77	115	60	41	14	3	1			
2 4	0.16	72										8	18	20	19	6	1						
5 4	0.51	200										12	70	170	43	3	2						
TOTAL	204.03	179190	1	20	102	174	619	1000	2076	6070	24512	46305	40023	29799	10727	3632	1394	677	160	51	9		



TABLE C3  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT DESIGN PHASE

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 1	0.25	199							4	5	13	34	16	13	6	3	4	5	1	1		
1 2	2.00	1495			1	3	16	25	62	113	196	316	241	190	124	78	44	26	5	9	2	
1 3	0.47	9965		1	4	25	48	103	198	400	693	1173	1894	292	504	256	149	153	44	26	4	
1 4	12.04	9167	4	4	16	47	149	192	305	701	1278	1698	1499	1249	832	444	268	224	93	34	12	
1 5	10.03	7616		3	16	24	90	181	331	629	1076	1400	1201	1071	643	399	206	180	74	45	17	1
1 6	0.28	5100			11	18	69	97	215	419	734	972	873	733	423	281	184	123	38	21	3	
1 7	0.16	4918			4	14	54	72	132	240	405	561	509	446	343	164	116	99	28	18	3	
1 8	0.22	5142			1	7	33	64	143	277	460	616	1094	819	307	178	90	68	15	11	1	
1 9	5.76	4800			1	7	21	92	136	234	374	507	1030	804	307	194	76	55	11	3		
1 10	0.15	232			1	2	4	6	11	15	45	63	36	42	22	8	5	6	6	6		
2 2	0.10	87			1	1	2	2	2	11	17	8	9	11	3	5	2	3	1			
2 3	1.29	993		1	4	3	13	21	45	65	130	190	168	132	81	33	31	41	9	1		
2 4	0.90	761			1	6	10	13	19	61	105	105	105	105	68	43	20	17	3			
2 5	0.09	400			1	7	6	11	19	47	97	51	66	46	31	30	9	16	8			
2 6	0.10	112				4	9	9	6	10	6	15	13	11	13	6	1	1				
2 8	0.10	77						1		4	10	18	34	8	1							
3 2	0.25	160			1	2	9	7	13	11	22	22	20	14	13	7	4	10	5			
3 3	0.05	730		1	2	7	13	14	45	54	106	136	130	92	50	37	33	23	9	7	1	
3 4	1.30	1088			1	6	10	26	37	62	132	200	207	145	86	50	36	44	8	2		
3 5	0.14	135		1	1	1	2	6	11	33	10	12	10	11	7	4	6	2	2			
3 6	0.25	205				1	2	8	6	16	31	29	33	26	24	11	5	10	2	1		
3 7	0.05	49						5	7	4	7	7	1	3	3	7	4	1				
3 9	0.05	42					2	1		5	8	8	5	6	4	1	2					
3 10	0.05	20									2	11	1	2	1			2	1			
4 1	0.75	577	1		4	2	4	7	17	41	96	105	111	79	51	30	12	15	4	2	1	1
4 4	0.30	449			1	10	7	19	48	65	76	72	84	42	21	9	16	4				
4 5	0.15	114					1	1	8	12	20	19	19	14	7	3	6	6	2			
4 6	0.05	59				1		1	5	13	5	4	2	17	4	4	4	1				
4 7	0.17	96			2	3	10	4	10	9	4	6	4	7	9	9	5	5	1			
5 2	0.17	109					1	3	5	3	20	24	21	10	8	4	6	3	1			
5 3	0.63	517			3	1	14	12	29	47	96	79	43	80	46	41	18	17	8	3		
5 4	0.61	548			1	7	22	17	21	20	64	96	81	69	54	31	18	15	7	2		
5 5	0.15	99			1			1	1	4	9	25	10	7	12	6	5	6	3	1		
5 6	0.11	69					1	1	2	6	9	9	9	11	5	3	4	7	2	2	2	
5 9	0.06	32						2		4	4	4	3	4	3	3						
6 4	0.65	93								1	8	12	3	6	7							
6 7	0.05	42	1	1			3	4	7	6	5	4	2	1	1	2	4	3	1	2	7	
7 1	0.10	63			1	3	1	2	7	7	9	11	7	4	2	2	3	1	2	1		
7 4	0.39	300			2		2	10	14	22	30	49	33	42	29	21	19	14	5			
7 5	0.05	76								1	4	11	6	5			1					
7 6	0.05	50							1	5	10	14	6	5	5	1						
TOTAL	67.57	52335	6	12	61	105	651	979	1929	4164	7301	9999	9274	7400	4367	2313	1309	1235	600	200	48	4



TABLE C5a  
DISTRIBUTION OF GROUND LOAD FACTORS  
PER THE  
TAKE-OFF MISSION PHASE  
PER AIRCRAFT ASSIGNED TO  
COVER AFB, DELAWARE

CU-FW BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	07.76	1507							1	3	44	661	882	30	4							
1 3	08.40	14003						1	4	12	75	662	4876	7790	710	83	13	2	7			
1 4	08.23	13072						1	2	3	26	443	5913	7020	421	39	3	1	2			
1 5	08.34	13735								5	41	940	6276	8237	573	71	4					
1 6	08.34	20005							1	9	119	1220	19500	21021	1470	119	24	3	2			1
1 7	07.49	12167								4	27	512	6112	7776	604	90	1	1				
1 8	08.04	10007									1	53	1522	1476	32	5						
1 9	07.44	1170									1	16	439	649	65							
1 10	08.30	7294									17	209	2907	4109	201	11						
2 3	08.00	660									4	9	700	232	14	1						
2 4	07.72	591										6	221	900	13	2						
2 5	08.03	592										6	223	363								
2 6	08.09	107											89	97	1							
2 7	07.46	405										4	219	254	8							
2 8	04.27	1676								1	2	41	604	901	43	3	1					
2 9	08.09	664										13	224	106	10	1						
2 10	08.27	1303										1	31	486	743	39	3					
3 2	09.06	51											29	22								
3 3	04.74	2616								1	9	119	1020	1250	179	26	4					
3 4	03.29	1003										16	460	510	9							
3 5	0.33	7											1	6								
3 6	08.32	740									2	5	337	395	8	1						
3 8	08.01	895										11	302	562	10							2
3 9	01.09	1107										1	10	450	690	23						
3 10	08.26	1797											61	771	800	32						
4 3	05.22	1716								1	0	173	676	701	73	4						
4 4	01.11	594										16	240	278	11							
4 5	04.03	7											4	3								
4 6	03.05	85										1	35	46	1							
4 7	0.01	73											40	32	1							
4 8	06.17	1709									3	111	766	793	52							
4 9	06.09	901										79	419	913	24							
4 10	08.53	3150								4	24	101	1906	1512	311	86	29	3	3			1
5 2	02.76	70											5	15								
5 3	09.02	120										1	67	51	6							
5 4	09.32	304										1	5	80	792	6	2	1	1	1		
5 5	07.06	78					1	1	2	1	1	1	5	22	29	2	1					
5 7	0.44	563											4	173	102	4						
5 8	03.16	674											29	204	106	4						
5 9	01.32	1350											14	524	704	34	2					
5 10	08.72	2177									3	28	806	1206	43	1						
6 4	0.46	8																				
6 7	03.01	679										10	270	313	32	2						
6 9	0.51	306											6	150	150	4						
TOTAL	4610.47	130001					1	3	9	44	370	4647	59106	73105	5706	513	76	11	14			4

TABLE C5b  
DISTRIBUTION OF GROUND LOAD FACTORS  
PER THE  
TAKE-OFF RUN MISSION PHASE  
PER AIRCRAFT ASSIGNED TO  
COVER AFB, DELAWARE

CU-FW BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.32	231								1	16	76	92	30	10							
1 3	0.20	3773				3	10	8	60	162	624	1123	1250	401	213	35	11	5				
1 4	01.12	6140			4	4	6	4	20	150	622	1096	2316	740	201	37	10	13				
1 5	02.01	8867				1	11	15	71	310	1073	2764	3161	1107	203	66	12	1				
1 6	07.03	17761		1	2	4	13	60	139	599	2107	3303	5404	2660	630	219	60	30		4	2	
1 7	01.07	7640				3	12	10	101	304	926	2127	2392	1070	356	87	26	14	4			
1 8	0.46	4313				1	6	4	35	130	940	1363	1497	526	190	20	4	2				
1 9	0.63	7202					3	7	15	95	277	995	775	330	69	24	0	4				
1 10	02.37	9320		2		5	22	30	140	513	1321	2394	2900	1627	507	253	95	10	10	3	2	
2 3	0.44	303						1		3	75	179	109	47	7	2						
2 5	0.41	766								1	16	101	112	75	1							
2 7	0.79	710							3	4	27	84	255	222	72	10	1					
2 8	0.31	2650						2	9	84	207	707	915	431	112	10	6	4	2	3		
2 9	0.17	1073			1	1	2	4	11	35	110	420	360	75	26	6	5	1				
2 10	0.71	6010				1	1	14	43	274	823	1717	1705	901	323	60	24	5	2			
3 6	0.04	202									5	25	101	104	41	3	2	1				
3 8	0.68	2074							3	12	45	245	620	640	361	109	32		1	1		
3 9	0.29	3774							23	67	162	430	900	1221	953	169	94	30	10	1		
3 10	01.02	8239					3	5	60	123	429	1244	2210	2402	1100	304	97	19	0			
4 8	0.36	1391						1	12	47	216	354	390	207	82	12	5	1				
4 9	0.22	2963			3	2	5	11	34	116	403	703	839	536	153	31	17	6	3	1		
4 10	0.24	6153						8	10	83	272	923	1932	1934	932	200	84	26	13			
5 7	0.62	591							3	24	87	151	157	60	17	4						
5 8	0.27	1316						4	8	22	64	160	256	353	101	31	0	6	1			
5 9	0.21	6401					2	2	17	66	171	499	1243	1501	705	134	39	16	5	1		
5 10	0.06	6446				1	1	5	15	59	200	703	1493	2132	942	233	41	10	33	1	1	
6 7	0.42	390									3	40	112	150	64	22	1					
6 9	0.71	737								9	15	30	99	210	204	105	27	17	6	7		
TOTAL	104.71	109010		3	11	32	140	750	1107	4101	13770	31713	39416	16326	4016	1240	376	194	29	6	2	



TABLE C1  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT DESIGN PHASE  
FOR AIRCRAFT ASSIGNED TO  
COVER AFD, COLUMBIA

CD-PH BLOCK		BLOCK TIME (HRS.)	TOTAL PAGES	LOAD FACTOR DISTRIBUTION (%)																			
				0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1	2	0.00	2091				1	2	4	10	75	250	661	660	345	99	10	7	5	1			
1	3	00.39	10499				3	4	24	44	280	965	1775	4207	5770	2142	763	200	75	54	19	7	1
1	4	00.09	20200						5	44	80	276	775	2051	4200	10844	2007	1277	370	142	64	34	4
1	5	00.44	24793				4	21	85	192	405	1171	2550	7200	10400	5744	1214	404	129	144	47	23	1
1	6	00.47	24400				1	4	60	140	405	1242	2871	6244	6200	2005	1422	320	217	121	13	7	
1	7	0.04	1042						2	5	14	54	107	244	671	272	65	26	10				
1	8	1.22	1042						2	7	14	46	126	280	263	215	92	20	4				
2	3	0.01	2302						1	3	34	207	1000	1000	211	41	6	2	1				
2	4	0.49	2001						3	4	20	61	200	1100	1100	571	164	32	12	1			
2	5	0.40	2110							2	9	30	170	600	777	791	11	11	6	1	2	1	
2	6	1.20	209								1	13	42	106	100	32	4	2					
2	7	0.22	2001							2	6	14	75	170	660	731	260	60	24	8	4	2	
2	8	13.27	7000						11	10	70	230	700	2701	700	272	62	14	12	1			
3	3	1.37	974						3	3	10	50	250	200	207	197	34	13	4	2			
3	6	1.00	2207							3	11	46	254	600	760	270	67	11					
4	3	0.30	2000						2	5	9	20	147	900	1101	1201	407	140	34	20	11	2	
4	4	0.32	2004							2	6	20	107	900	900	1075	900	106	14	4	2	1	
4	5	2.36	1254						2	6	3	11	50	200	302	400	197	24	10	3			
4	6	1.77	645								3	11	50	200	302	400	197	24	10	3			
4	7	0.00	200									9	70	104	100	40			1				
4	8	1.13	974							1	4	24	110	220	70	104	31	11	2		1		
5	2	1.02	600								3	75	60	203	300	121	24	3					
5	3	0.30	1217							2	20	92	347	600	1100	299	149	37	8	1			
5	4	0.45	7007							2	20	91	417	1103	1100	509	119	31	14	8	1		
5	5	2.74	1750						1	2	7	13	146	602	722	200	21	5	2	2			
5	6	0.04	333									5	100	104	16	1							
6	4	0.60	273									21	66	126	47	6	1						
6	7	0.60	705									66	126	140	66	77	30	10	13	5			
TOTAL		203.05	104011		3	14	42	205	129	1746	5000	17004	40477	47120	10425	6373	2027	763	499	113	42	2	

TABLE C2  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOWING AND/OR BRACE DESIGN PHASE  
FOR AIRCRAFT ASSIGNED TO  
COVER AFD, COLUMBIA

CD-PH BLOCK	BLOCK TIME (HRS.)	TOTAL PAGES	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.00	209						4	22	90	110	70	60	20	0	2						
1 4	0.11	2000				1	4	31	30	110	274	400	604	979	200	310	140	62	24	10	4	
1 5	0.07	2007				1	4	34	31	124	240	403	607	642	240	314	136	66	17	5	1	
1 6	0.01	2007				1		34	30	110	242	397	700	704	600	233	123	45	13	2	1	
2 3	0.70	426						3	16	29	90	100	106	77	110	60	41	14	1	1		
2 4	0.24	72									12	10	20	20	6	1						
2 5	0.01	200									17	70	170	40	3	2						
TOTAL	14.05	11930		1	4	10	102	100	391	899	1600	2399	2204	2011	940	471	100	97	10	6		

TABLE C3  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT DESIGN PHASE  
FOR AIRCRAFT ASSIGNED TO  
COVER AFD, COLUMBIA

CD-PH BLOCK	BLOCK TYPE (HRS.)	TOTAL PAGES	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.00	229				1	2		3	19	33	61	42	20	21	6	5		1			
1 3	0.00	1040			2	11	23	37	64	129	201	299	213	201	130	77	60	94	14	10	3	
1 4	0.00	2004			4	21	70	66	140	295	444	579	554	445	311	146	60	92	30	16	4	1
1 5	0.00	2004			2	9	13	50	91	124	271	427	425	422	277	147	60	100	50	19	6	
1 6	0.00	2500				6	41	54	120	227	344	470	342	244	220	143	62	72	10	6	1	
1 7	0.05	100					3	5	7	13	14	16	10	10	10	3	3	3				
1 8	0.05	50					1	1	4	6	5	6	6	6	2	3	3	4	1			
2 3	0.05	123					1	2	10	23	40	63	101	60	74	44	31	14	20	4	2	
2 4	0.05	409			1	4	5	10	11	54	72	100	60	60	60	27	8	9	1			
2 5	0.20	176						3	7	22	29	31	39	10	11	15		5				
3 2	0.10	42						1	4	2	8	9	3	6	3	2		1	2			
3 3	0.35	294					1	5	5	11	21	36	50	39	19	10	7	5	3	1		
3 4	0.00	600			1	5	15	19	10	47	70	127	100	91	54	29	10	27	6			
3 5	0.10	85			1		2		4	9	10	11	9	13	7	3	2	3	1	2		
3 6	0.20	140				1	1	4	4	13	21	21	21	20	20	7	4	9				
4 3	0.30	391			1	4	2	2	4	12	24	60	70	60	31	17	8	11	3	2	1	1
4 4	0.30	209						8	5	10	26	40	40	40	20	17	4	14	3			
4 5	0.15	114					1	1	8	12	20	10	10	14	7	3	6	6	2			
4 6	0.05	50					1		1	5	13	5	4	2	10	4	4	4	1			
4 7	0.05	65			1		4	2	7	6	6	5	6	6	6	6	6	6				
5 2	0.17	109					1	5	5	3	20	24	21	10	8	4	6	3				
5 3	0.40	350			2	1	6	6	19	29	73	43	34	30	30	23	11	9	4	1		
5 4	0.41	343				1		8	9	13	41	60	50	44	29	9	19	9	2	2		
5 5	0.15	99			1		1			4	9	25	10	7	12	6	3	6	3	1		
5 6	0.06	32							2	4	4	4	3	4	3		3					
6 4	0.05	33								1	6	12	3	4	3							
6 7	0.05	42						3	4	6	5	4	2	1	2	4	3	1	2	7		
TOTAL	19.27	13165		6	4	33	70	262	344	630	1313	2149	2004	2302	2062	1347	753	436	403	144	71	10



TABLE C7a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR AIRCRAFT ASSIGNED TO  
TINIAN AFB, GUAM

CO-PILOT BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																								
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 1	33.71	1079																									
1 2	33.44	5776																									
1 3	33.75	17100																									
1 4	33.75	22000																									
1 5	33.97	23440																									
1 6	33.71	21440																									
1 7	33.90	18893																									
1 8	31.30	2941																									
1 9	0.30	0																									
1 10	33.39	17390																									
1 11	32.44	75																									
1 12	33.70	104																									
1 13	33.40	701																									
1 14	1.00	1																									
1 15	0.22	482																									
1 16	34.12	340																									
1 17	1.41	0																									
1 18	37.44	290																									
1 19	37.97	170																									
1 20	0.62	75																									
1 21	0.70	5																									
1 22	33.40	1102																									
1 23	0.44	40																									
1 24	33.39	640																									
TOTAL	1079.71	136122	1																								

TABLE C7b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF AND MISSION PHASE  
FOR AIRCRAFT ASSIGNED TO  
TINIAN AFB, GUAM

CO-PILOT SECTOR	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)															
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10
1 2	0.44	400										2	12	23	100	204	55	7
1 3	0.40	2740										0	40	150	904	1133	396	61
1 4	11.75	6634										33	120	470	2114	2695	939	185
1 5	33.30	8107										8	73	449	2035	5427	1019	149
1 6	33.44	11079										40	170	900	4047	4930	1512	290
1 7	0.75	4817										1	0	76	307	1647	1911	697
1 8	3.23	1867										3	5	20	130	619	805	241
1 10	30.30	10040										63	341	2045	4127	7329	2689	406
1 11	1.43	1070										1	5	82	193	440	122	12
1 12	0.49	300										5	2	31	137	124	35	3
1 13	0.73	277										1	2	24	95	110	41	8
1 14	0.49	235											22	53	45	80	24	7
1 15	0.44	202										1	12	79	64	37	7	1
1 16	1.04	640										11	44	84	135	192	113	63
1 17	2.40	340											2	70	139	132	61	2
1 18	1.02	1101										14	30	143	205	375	154	40
TOTAL	104.07	60173	1	5	9	11	40	200	887	5061	10775	24167	8100	14995	261	71	71	5

TABLE C7c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR AIRCRAFT ASSIGNED TO  
TINIAN AFB, GUAM

CO-PILOT SECTOR	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)															
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10
1 1	1.00	904										14	53	345	320	104	32	14
1 2	11.40	9299										22	100	901	1001	1063	930	127
1 3	20.30	13040										10	279	1307	4040	9499	1526	272
1 4	20.37	10111										12	77	329	1700	5130	2009	404
1 5	29.73	19099										21	80	380	1861	5362	9463	2100
1 6	30.40	12093										10	50	319	1304	4287	4340	1990
1 7	30.12	19000										17	73	430	1803	4099	5867	1003
1 8	0.44	847										2	12	65	152	171	107	72
1 9	0.50	349												5	31	154	151	46
1 10	2.21	1040												60	360	462	100	1
1 11	0.40	974										3	14	94	219	187	46	5
1 12	2.05	1001											29	113	300	395	109	30
1 13	1.63	382											3	24	197	135	53	11
1 14	0.44	257											7	34	60	82	35	12
TOTAL	140.42	89014	1	7	10	90	904	1047	9143	20463	30166	10491	2940	562	170	54	5	2



TABLE C7d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-AND-GO ROLL MISSION PHASE  
FOR AIRCRAFT ASSIGNED TO  
TINKER AFB, OKLAHOMA

CO-PU BLKCE	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	1	0.45	221					1	1	13	14	69	37	66	15	4	1					
1	2	3.46	2242				2	5	48	155	324	559	526	792	168	66	16	1				
1	3	21.19	15671		4	12	21	59	95	340	976	2360	3695	3520	2516	1191	461	179	97	27	5	
1	4	31.26	26707	1	15	72	118	276	304	817	1505	3516	4797	5534	6409	2118	1058	500	366	105	36	9
1	5	20.89	16039			3	9	42	80	230	709	2010	4487	4527	2666	937	706	100	63	4		
1	6	5.31	2691			1	2	7	17	55	160	390	614	660	483	215	72	15	2			
1	7	27.72	21151					15	62	226	816	2740	5714	6792	3496	954	239	64	25	4	4	
1	8	45.75	76587			4	7	60	127	316	1951	5026	10091	11221	5911	1746	300	94	60	3		
1	9	40.75	53040			3	6	26	60	239	1122	4190	9482	11065	5487	1456	316	69	19	1		
1	10	1.77	1949				1	1	6	27	124	276	383	377	290	99	37	10	1			
TOTAL	194.64	146300	1	19	95	164	488	846	2310	7091	20874	40993	64267	77496	39081	2925	1050	589	139	95	9	

TABLE C7e  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR AIRCRAFT ASSIGNED TO  
TINKER AFB, OKLAHOMA

CO-PU BLKCE	BLOCK TIME (MIN.)	TOTAL PEAK	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1	1	3.70	109						6	5	13	34	16	13	6	3							
1	2	1.70	1092			1	1	13	15	51	87	145	236	176	146	91	65	34	23	1	8	2	
1	3	5.46	3075			1	1	14	24	55	101	204	581	861	729	559	319	144	75	73	17	10	
1	4	6.81	5038			4	9	20	51	102	201	309	782	979	880	795	453	236	151	97	19	12	
1	5	4.00	3957			1	6	8	26	64	129	262	490	768	700	486	276	131	86	60	25	14	
1	6	1.95	1508				5	7	13	24	55	113	223	326	326	232	114	65	40	24	5	3	
1	7	5.08	4314				4	14	51	67	120	352	644	828	880	616	323	154	108	87	26	18	
1	8	6.22	5147				1	7	33	64	143	377	740	1114	1094	819	587	178	90	64	15	11	
1	9	5.71	4750				1	6	20	50	132	326	719	991	1026	708	395	149	73	51	10	5	
1	10	0.35	257				1	2	4	6	11	15	45	43	36	42	22	8	5	6			
1	7	0.25	10									3	17	6	1	1	1	3	5				
1	4	0.15	115							9	10	34	28	16	4	8	2	4					
1	9	0.05	42					2	1	5	8	8	5	6	4	1	2						
4	3	0.70	151					2	3	13	22	20	24	18	18	11	4	4	1				
4	4	0.17	76					1	1	2	4	9	14	14	5	3	2	1	1				
4	7	0.15	31					1	3	4	2	3	1	1	3	1	1	1	1	1			
TOTAL	99.87	10101	6	30	70	244	495	995	2246	4387	6795	9040	6473	2621	1150	682	506	148	85	23	1		



TABLE C8a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR AIRCRAFT ASSIGNED TO  
TRAVIS AFB, CALIFORNIA

CM-FW BLOCK	TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	37.45	481								3	28	219	204	14	10	3						
1 3	37.97	4510							1	18	215	1858	2244	182	12							
1 4	37.45	1767								1	78	612	1026	48	2							
1 5	37.36	4271							1	11	117	1604	2407	216	15							
1 6	186.12	6627								10	284	2893	3252	183	4	1						
1 7	54.38	914									4	272	622	17								
1 8	119.72	1956							1	7	76	1441	1719	103	6	2	1					
1 10	68.74	648									7	350	288	8					1	2		
2 2	31.49	96									6	33	52	4	1							
2 3	71.40	1000						1	4	6	51	623	1199	64	7	1	1	2	1			
2 4	35.34	480									6	164	275	34	1							
2 5	35.41	1132								1	37	537	599	16	1		1					
2 6	12.74	166									2	113	241	17								
2 7	7.45	114									2	78	33	1								
2 8	37.72	887							1	4	12	327	507	37	3							
2 9	31.73	591									8	65	213	273	29	2	1					
2 10	117.47	4854						1	5	40	401	1060	2214	293	31	7	2					
3 2	10.71	1277							1	25	163	445	487	79	11	1						
3 3	34.49	288									19	122	136	11								
3 4	47.31	464									26	204	229	17			1					
3 5	29.67	1274							1	5	72	436	645	62	5							
3 6	6.77	61									8	21	17									
3 7	5.13	42									2	19	21									
3 8	33.69	827									8	44	334	322	84	11	4					
3 9	7.75	701								5	5	72	253	288	66	18		2				
3 10	124.54	4700						1	6	17	260	1767	1899	273	27	9	1					
4 3	7.09	6										3	1									
4 4	5.69	357									7	126	212	5								
4 6	11.64	116										37	79									
4 8	3.75	863									43	413	387	19	1							
4 9	0.47	18										8	10									
4 10	0.73	15									1	25	9									
5 3	30.94	832									1	31	414	379	6	1						
5 4	60.77	645									20	346	274	5								
5 6	10.61	103								1	2		68	31	1							
5 8	44.70	435										4	219	213		1						
5 9	10.37	172										1	64	102	5							
5 10	5.77	1078							5	3	31	26	148	332	374	122	57	17	10	3		
7 3	13.77	138										19	91	62	6							
7 4	47.74	508										15	162	370	11							
7 5	4.22	51											28	23								
7 6	10.59	145										5	114	25			1					
7 7	3.89	126											37	96								
7 8	28.64	886									1	45	488	354	75	3						
7 9	16.36	293											114	175								
TOTAL	1666.51	48993		1			5	6	58	219	2488	19784	24184	2899	230	47	21	5	2	2		

TABLE C8b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR AIRCRAFT ASSIGNED TO  
TRAVIS AFB, CALIFORNIA

CM-FW BLOCK	TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.61	368							8	16	40	117	121	34	15	8						
1 4	0.79	456					1	1	1	4	31	140	194	68								
1 5	4.00	2671						4	12	24	104	334	778	848	339	135	35	14	1			
1 6	0.56	4149			2			3	18	27	113	449	1700	1441	621	140	36	12	7			
1 7	2.14	1207							2	12	32	182	339	418	173	42	6	1				
1 8	0.75	4676			1		3	25	41	118	233	513	1290	1324	642	241	110	97	27	1		
1 10	2.52	2116				1	5	14	35	122	330	612	540	317	113	38	8	2	1			
2 4	0.39	267							2	13	57	86	68	33	2	1						
2 5	0.46	404					1		2	6	15	43	122	120	62	30	3					
2 7	0.56	891					1	15	24	49	58	121	134	226	109	82	46	19	5	1	1	
2 8	2.79	1236						4	15	33	89	188	263	340	183	65	35	17	4			
2 9	2.16	1775						4	9	23	81	211	509	513	271	89	29	13	1	2		
2 10	13.81	8814		4	15	79	114	256	520	1120	1930	1895	1172	474	255	197	69	12	2	1		
3 5	1.52	923			1		6	14	43	62	283	121	234	147	54	25		9	2			
3 7	0.47	297								6	96	114	69	11	1							
3 8	2.12	1750			1		5	19	17	45	92	196	430	527	239	100	41	24	13	2	1	
3 9	0.59	690					1	5	7	8	15	35	97	125	129	75	25	13	7	2	7	
3 10	12.14	7461			1		6	26	95	145	336	1887	1971	1970	1215	434	157	59	25	6		
4 6	0.50	422		1					2	8	27	133	147	76	25	2						
4 8	2.44	551							12	27	117	118	149	96	32							
4 10	0.73	567			1				1	3	19	87	170	140	92	46	2	2	3			
5 6	0.53	887					6	25	34	65	72	120	114	145	119	64	34	14	19	2		
5 8	4.23	3292					3	13	26	51	129	394	954	1827	451	148	48	79	15	2	2	
5 9	0.61	474			1		1	4	9	23	55	81	59	93	74	46	17	8	2	1		
5 10	0.45	549			1		5	12	11	34	59	100	50	99	92	48	22	4	5	1		
7 4	0.47	158								12	73	86	132	53	4	1						
7 5	0.67	548							1	35	104	111	204	89	15							
7 7	0.99	682					2	4	8	25	46	87	188	144	93	50	21	8	5	1		
7 8	2.74	2453						8	16	36	101	352	674	648	420	124	49	18	7			
7 9	1.38	1185						5	9	14	28	188	167	209	288	197	98	41	20	13	1	
TOTAL	76.51	58954		1	13	49	272	445	1122	2683	7812	13165	14185	7551	2725	1111	476	236	34	13	1	



TABLE C83  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR AIRCRAFT ASSIGNED TO  
TRAVIS AFB, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	6.11	1992				1	1	7	12	86	291	641	699	196	60	24	8	5	1			
1 3	11.27	6430				3	20	16	109	204	779	1742	1993	930	295	90	101	97	1			
1 4	13.50	7171					15	35	80	204	914	2090	2295	1011	320	112	26	26	1			
1 5	11.79	6480					1	16	57	216	820	1710	2196	1095	321	71	25	4				
1 6	14.99	8642					4	11	53	216	946	3116	2963	995	265	50	12	3				
2 2	1.72	664			1			1	13	27	80	109	200	118	46	15	6	4		3	1	
2 3	13.91	4932		1	4	7	14	22	30	72	303	1130	1761	434	110	60	22	27	6	1		
2 4	6.71	2764						1	17	43	230	850	820	567	164	49	12	3				
2 5	3.16	2176				3	8	29	62	124	350	486	684	269	94	51	26	9	1			
2 6	1.41	1509			1	8	43	28	47	131	259	234	397	225	80	33	16	5	2			
2 8	1.47	502						5	6	14	71	162	166	93	15	4	3	1				
3 2	1.60	790				1	10	8	29	39	157	199	239	85	24	15	5	4	1			
3 3	7.79	4163				2	14	29	70	109	948	1170	1345	937	194	50	23	24	9	5		
3 4	6.20	3971				1	14	36	90	160	970	1162	1240	471	120	52	20	8	2	6		
3 5	0.67	777		3	9	6	39	19	56	66	132	90	136	110	69	47	24	15	4	5	1	
3 6	1.41	776						2	6	11	104	239	301	74	16	2	1	3				
3 7	0.66	471						1	5	12	85	117	146	80	19	6						
3 10	0.91	322							3	25	136	63	82	11	2							
4 3	0.31	260						1	5	9	31	93	73	34	13		1					
4 4	1.29	1104						4	13	31	167	395	291	172	43	16	7	4				
5 3	3.27	1576						5	11	24	41	132	429	471	303	84	40	13	3			
5 4	4.10	2749			6	2	17	26	90	101	491	640	734	300	124	42	10	5	6	2		
5 6	2.20	1947						1	5	26	77	230	466	321	120	45	8	3	7	1	1	
7 3	1.35	801		1	3	9	19	9	27	40	163	122	210	116	32	19	8	4	9	2		
7 4	3.42	3269						8	20	108	344	953	964	606	212	75	16	8	7	2		
7 5	1.01	716						4	4	17	82	202	233	66	23	1	2	1	1			
7 6	0.83	854						1	17	67	195	226	242	92	22	6	1	3				
TOTAL	125.34	66500		5	24	43	229	335	944	2510	8535	18942	21305	9177	2709	956	407	225	50	25	1	

TABLE C84  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-AND-GO ROLL MISSION PHASE  
FOR AIRCRAFT ASSIGNED TO  
TRAVIS AFB, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	1.37	895			2	1	7	7	29	64	150	160	206	147	71	32	15	4				
1 4	2.01	1740					4	13	30	113	254	349	404	341	149	56	21	13	1			
1 5	5.90	4004			1		11	25	65	231	593	1116	830	737	340	85	33	8	1			
1 6	4.04	1707					7	10	50	190	550	1053	782	605	272	55	24	6	1			
1 7	1.20	926							1	25	125	295	240	104	46	8	2					
TOTAL	16.12	11300			3	1	29	63	175	629	1680	2973	2470	2094	878	236	95	31	3			

TABLE C85  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR AIRCRAFT ASSIGNED TO  
TRAVIS AFB, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.27	134				1	1	9	8	7	18	19	23	16	12	7	7	2	3	1		
1 3	0.04	663				1	11	11	33	67	109	95	92	92	47	35	25	26	13	8		
1 4	0.95	795				1	6	20	24	41	71	113	92	105	60	62	20	35	19	6	1	
1 5	1.35	994				1	3	9	26	34	96	191	157	114	153	90	61	35	23	10	8	
1 6	1.30	1032				2	13	19	42	70	165	160	167	157	89	69	32	27	16	10	1	
1 7	0.15	110							5	15	15	23	11	20	10	5	3	9	2			
2 2	0.19	87					1	2	2	11	17	8	9	9	11	3	5	2	3	1		
2 3	0.60	470		1	4	2	11	11	22	25	67	97	69	50	37	22	17	21	5	1		
2 4	0.37	272				2	5	3	8	27	33	90	42	36	20	16	12	8	2			
2 5	0.20	274				1	2	6	12	23	28	31	20	20	15	9	11	6				
2 6	0.17	112				4	9	9	4	10	6	15	13	11	15	6	6	1	1			
2 8	0.17	77						1	1	4	10	10	34	8	1							
3 2	0.10	80				1	2	8	6	9	11	3	11	7	9	4	1	4	3			
3 3	0.50	302		1	2	6	8	9	34	33	72	84	89	53	31	27	26	10	6	2	1	
3 4	0.35	205				1	1	3	7	10	26	44	47	30	26	13	16	13	2	2		
3 5	0.05	50							2	2	15	7	3	5	4	4	2	3	1			
3 6	0.75	57				1		1	2	3	10	8	12	6	4	4	1	1	2	1		
3 7	0.05	49							5	7	4	7	1	3	3	7	4	1				
3 10	0.05	20									2	11	1	2	1							
4 3	0.05	15							2	4	5	2	11	7	2	2						
4 4	0.10	102							7	13	16	11	13	26	9	1	3	1	1			
5 3	0.27	107				1	8	6	10	10	21	36	12	22	16	7	8	4	2			
5 4	0.27	205				1	14	8	10	15	23	16	23	23	25	22	5	6	5			
5 6	0.17	69					1	1	2	6	9	9	5	11	5	3	4	7	2	2	2	
7 3	0.10	63				1	1	2	7	7	9	11	7	4	2	2	3	1	2			
7 4	0.30	306				2	2	10	14	22	38	49	33	42	29	21	19	14	5			
7 5	0.75	26							1	4	11	4	5	5			1					
7 6	0.35	50							1	5	10	14	6	5	5	1	2					
TOTAL	8.53	7849		2	10	37	145	100	366	605	1025	1080	974	945	599	402	271	246	116	44	4	



TABLE C6  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF PHASE  
FOR DATA ACQUIRED AT  
ALTUS AFB, OKLAHOMA

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.50	700									4	240	445	21								
1 5	7.25	143										63	90									
1 7	1.10	9										2	7									
TOTAL	10.90	852									4	305	542	21								

TABLE C7  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN PHASE  
FOR DATA ACQUIRED AT  
ALTUS AFB, OKLAHOMA

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.35	315								5	26	107	109	40	17	2	1					
1 5	0.36	247								5	5	102	120	11	1							
TOTAL	0.71	562								5	31	209	229	50	18	2	1					

TABLE C8  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT PHASE  
FOR DATA ACQUIRED AT  
ALTUS AFB, OKLAHOMA

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.00	650						7	15	56	100	196	130	64	5				2			
1 5	0.40	795							3	74	140	110	8	1		1						
1 7	0.00	451								16	172	216	46	3								
TOTAL	2.16	1496						7	18	96	310	326	182	68	5	1	2					

TABLE C9  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-AND-GO ROLL PHASE  
FOR DATA ACQUIRED AT  
ALTUS AFB, OKLAHOMA

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	2.06	1003					2	6	16	52	132	476	690	175	97	27	9	1				
1 7	0.27	163						3	2	6	37	50	30	20	9	3	1					
1 9	1.17	700						2	6	20	123	100	362	190	24	1						
TOTAL	3.50	1866					2	11	24	80	292	692	980	295	90	31	10	1				

TABLE C10  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT PHASE  
FOR DATA ACQUIRED AT  
ALTUS AFB, OKLAHOMA

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.05	41						1	7	9	4	4	7	6	4	3			2			
1 5	0.35	200							0	9	36	70	62	15	10	0	3	5				
1 7	0.10	40					1		1	2	4	13	14	7	1	4		1				
1 9	0.20	126				1		1	7	14	19	13	20	10	10	0	2	3	1			
TOTAL	0.70	407				1	1	2	25	20	63	100	131	67	25	25	5	9	1			



TABLE C10a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TARE DESIGN PHASE  
FOR DATA ACQUIRED AT  
ARABILLO APARTMENT, TEXAS

CO-PO SLOPE	SLOPE TYPE (INCL.)	TOTAL PEAKS	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.8	0.85	0.9	0.95	1.0	1.05	1.1	1.15	1.2	1.25	1.3	1.4	1.5	1.7	2.0
1	3	0.10	240												107	130										
1	4	0.07	1237												11	400	611									
1	5	0.10	80												62	40										
TOTAL		00.00	1071												11	790	700	12								

TABLE C10b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TARE-OUT AND DESIGN PHASE  
FOR DATA ACQUIRED AT  
ARABILLO APARTMENT, TEXAS

CO-PO SLOPE	SLOPE TYPE (INCL.)	TOTAL PEAKS	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.8	0.85	0.9	0.95	1.0	1.05	1.1	1.15	1.2	1.25	1.3	1.4	1.5	1.7	2.0
1	3	0.01	240												3	10	30	100	30	7						
1	4	0.17	993												2	13	202	297	70	0	1					
1	5	0.05	179												2	3	77	70	17	1						
TOTAL		1.00	970												7	26	299	462	107	10	1					

TABLE C10c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT DESIGN PHASE  
FOR DATA ACQUIRED AT  
ARABILLO APARTMENT, TEXAS

CO-PO SLOPE	SLOPE TYPE (INCL.)	TOTAL PEAKS	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.8	0.85	0.9	0.95	1.0	1.05	1.1	1.15	1.2	1.25	1.3	1.4	1.5	1.7	2.0
1	3	0.01	470												0	10	170	100	90	10						
1	4	0.20	1010												2	27	111	202	400	90	20	3	1			
1	5	0.17	200												2	7	27	101	80	20	10	1	1			
TOTAL		0.11	2070												1	4	40	177	570	700	100	40	4	1	1	

TABLE C10d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOWER-AND-ON ROLL DESIGN PHASE  
FOR DATA ACQUIRED AT  
ARABILLO APARTMENT, TEXAS

CO-PO SLOPE	SLOPE TYPE (INCL.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0				
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.8	0.85	0.9	0.95	1.0	1.10													
1	2	0.10	171												7	11	67	40	20	20	10	1	1							
1	3	0.01	403												1	10	123	120	80	30	11	0								
1	4	0.20	600												0	20	87	270	270	11	20	0	1	1						
1	5	0.10	1210												1	10	120	400	300	100	0	0								
1	7	0.10	1701												0	27	407	620	200	60	10	0	1							
1	8	0.10	9040												0	10	100	270	270	100	40	10	1							
1	9	0.05	7010												1	1	10	100	100	100	100	10	1							
1	10	0.05	600												1	1	10	100	100	100	100	10	1							
TOTAL		00.00	21037												2	0	10	100	100	100	100	100	10	1						

TABLE C10e  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT DESIGN PHASE  
FOR DATA ACQUIRED AT  
ARABILLO APARTMENT, TEXAS

CO-PO SLOPE		SLOPE TYPE (INCL.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION																								
				0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1	2	0.05	10										1	0		3	0		0		1		1					
1	3	0.07	107										1	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
1	4	0.10	200										0	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
1	5	0.10	110										0	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
1	7	0.10	200										0	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
1	8	0.07	1000										0	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
1	9	0.10	600										0	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
1	10	0.10	100										0	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
TOTAL		0.00	2000										0	7	10	100	100	100	100	100	100	100	100	100	100	100	100	



TABLE C11a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA OBTAINED AT  
AMERICAN SL, GUAM

CD-FU BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 3	0.30	46										3	40										
1 8	0.07	0																					
1 10	7.30	100											124	21									
2 3	11.73	69									1		22	40									
2 8	11.09	1												1									
2 9	7.90	30									1		16	21									
3 4	9.72	4												3		1							
TOTAL	60.62	297									2		169	129		1							

TABLE C11b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA OBTAINED AT  
AMERICAN SL, GUAM

CD-FU BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 8	0.42	299							1	4	29	109	122	29	3								
1 10	0.67	379							1	17	99	140	129	99	1	1							
2 3	9.31	194								3	17	96	90	20	4	2							
2 9	0.90	242								3	10	97	89	49									
TOTAL	1.00	1004							2	27	109	402	304	127	10	3							

TABLE C11c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA OBTAINED AT  
AMERICAN SL, GUAM

CD-FU BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 3	0.00	201									13	104	100	16	3	3	2						
2 3	1.14	314					1			4	30	117	127	20	4	3	1			1			
2 8	0.01	121								2	10	49	47	10	2	1							
3 4	0.77	130								2	15	46	43	25	3		2	1	1				
TOTAL	2.70	666					1			8	68	316	307	77	12	7	5	1	2				

TABLE C11d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAXI-AND-ON ROLL MISSION PHASE  
FOR DATA OBTAINED AT  
AMERICAN SL, GUAM

CD-FU BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2 3	0.20	100						1	0	10	32	30	23	29	12	7	1					
2 4	0.16	72								0	10	20	19	0	1							
TOTAL	0.44	201						1	0	10	42	50	42	48	12	8	1					

TABLE C11e  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA OBTAINED AT  
AMERICAN SL, GUAM

CD-FU BLOCK	BLOCK TIME (min.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.00	17									1	3	8	3	2	3			1		1	
2 3	0.10	114				1	2	1	7	1	17	11	13	10	10	0	3	10	4	2		
2 4	0.00	24									1	3	13	7	2							
2 8	0.00	26									1	1	17	2								
3 4	0.00	29									12	9	0	1			1					
TOTAL	0.20	233				1	2	0	10	10	20	30	30	29	17	10	4	11	4	3		



TABLE C11  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
ANDREWS AFB, WASHINGTON, D.C.

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 3	0.30	300									19	141	199	7									
1 4	0.29	41									2	21	10										
1 6	13.69	941									3	239	310	7									
2 3	5.29	69										13	94	2									
3 9	1.07	29										7	22										
3 10	2.86	69										10	81										
4 4	5.60	23										11	12										
4 10	9.90	100									3	60	120	1									
TOTAL	40.50	1344									29	519	779	17									

TABLE C12  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
ANDREWS AFB, WASHINGTON, D.C.

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.33	279								0	16	40	80	74	30	14	0	9				
1 4	0.33	77											0	30	10							
3 9	0.68	930								5	42	100	199	90	0							
4 10	0.70	799					1	2	11	90	117	160	190	161	74	10	0	3				
TOTAL	2.74	1605					1	2	19	79	199	441	570	271	97	20	17	3				

TABLE C12c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
ANDREWS AFB, WASHINGTON, D.C.

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	1.32	1274					1		10	30	171	393	274	173	94	21	1	1				
2 3	0.65	304								1	20	120	163	40	16	2						
4 4	0.02	3											3									
4 5	0.01	330									13	144	194	16	3							
TOTAL	3.30	1991					1		10	34	212	663	714	297	75	23	1	1				

TABLE C12d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
ANDREWS AFB, WASHINGTON, D.C.

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	0.10	109				1	2	3	4	30	19	30	17	15	11	5	4	2	1			
2 3	0.05	41							1	4	5	10	5	0	3							
4 5	0.05	14							1	1	0	3	1	1	3	1	1					
TOTAL	0.20	164				1	2	3	5	15	20	23	22	24	17	6	5	2	1			



TABLE C13a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
ANTICUM, WEST INDIES

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	428								6	14	106	213	9								
2	3	79								2	2	40	31	4								
2	8	187							1	2	13	57	100	8	2	1						
2	9	217									9	86	112	9	1							
TOTAL	17.97	921							1	8	40	379	499	30	3	1						

TABLE C13b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
ANTICUM, WEST INDIES

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2	8	377							1	20	45	80	151	53	16	3	4	2	1	1		
2	9	518			1	1	1	3	8	27	77	160	164	45	18	6	4	3				
TOTAL	0.94	895			1	1	1	3	9	47	122	240	315	98	34	9	8	5	1	1		

TABLE C13c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
ANTICUM, WEST INDIES

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	357					5	3	23	34	64	9	118	52	30	13	3	1				
2	3	239								2	20	92	105	17	3							
TOTAL	0.84	596					5	3	23	36	84	101	223	69	33	13	3	1				

TABLE C13d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
ANTICUM, WEST INDIES

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	42							2	6	3	3	8	3	9	3		4	1			
2	3	33							1		4	10	9	1	8							
TOTAL	0.10	75							3	6	7	13	17	4	17	3		4	1			



TABLE C14a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
ASCENSION ISLANDS, S. ATLANTIC

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2 3	3.02	14									1	0	5									
7 9	3.36	106										40	30									
TOTAL	7.48	120									1	30	63									

TABLE C14b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
ASCENSION ISLANDS, S. ATLANTIC

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
2 9	0.32	322								3	20	109	114	13	1								
TOTAL	0.32	322								3	20	109	114	13	1								

TABLE C14c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
ASCENSION ISLANDS, S. ATLANTIC

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2 3	0.46	201																				
TOTAL	0.46	201																				

TABLE C14d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
ASCENSION ISLANDS, S. ATLANTIC

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2 3	0.05	47																				
TOTAL	0.05	47								3	4	13	11	3	6	3						



TABLE C13  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
DEALT AFB, CALIFORNIA

CU-PW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	1.14	12										3	0	1								
1 6	17.01	1151								5	78	620	425	15								
TOTAL	18.15	1163								5	78	631	425	16								

TABLE C13a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
DEALT AFB, CALIFORNIA

CU-PW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	0.45	147								5	4	69	55	12	2							
1 6	0.40	209									29	90	82	17	1							
TOTAL	0.85	356								5	33	109	137	29	3							

TABLE C13b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
DEALT AFB, CALIFORNIA

CU-PW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	2.49	1135					1	2	12	24	109	361	306	149	73	15	1	2				
TOTAL	2.49	1135					1	2	12	24	109	361	306	149	73	15	1	2				

TABLE C13c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-DOWN ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
DEALT AFB, CALIFORNIA

CU-PW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	1.25	801							0	33	130	203	316	90	12	1						
1 7	0.42	260								25	105	107	31	2								
TOTAL	1.67	1149							0	33	155	306	423	129	14	1						

TABLE C13d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
DEALT AFB, CALIFORNIA

CU-PW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	0.25	107					4	5	0	10	20	24	31	33	20	4	4	4	3	4	1	
1 7	0.35	36							1	4	3	9	6	5	4	2		2				
TOTAL	0.50	223					4	5	0	14	21	33	37	38	24	6	6	6	3	4	1	



TABLE C160  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
SIEN HUA AFB, VIETNAM

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3 0	0.00	15										6	9									
4 4	3.42	247									7	124	209	5			2					
4 0	3.75	000									43	413	207	10	1							
4 9	0.07	10										6	10									
7 5	0.62	39										21	34									
7 6	10.50	140									5	114	25			1						
TOTAL	27.25	1429									55	604	604	24	1	1	2					

TABLE C161  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
SIEN HUA AFB, VIETNAM

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3 0	0.44	294								5	44	91	132	75			1					
4 0	0.04	551							12	27	117	110	340	96	32							
TOTAL	1.12	845							12	30	161	200	201	119	32	1						

TABLE C162  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
SIEN HUA AFB, VIETNAM

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
4 4	0.04	753						2	8	25	127	230	107	114	24	7	5	2				
7 5	1.01	716						4	4	17	82	202	233	66	23	1	2	1	1			
7 6	0.03	094					2	1	17	47	195	224	242	92	22	4	1	3	1			
TOTAL	2.08	2223					2	7	29	69	404	750	642	274	69	14	8	6	1			

TABLE C163  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
SIEN HUA AFB, VIETNAM

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
4 4	0.05	52							3	0	4	10	7	14	2		2					
7 5	0.05	26							1	1	5	11	4	1			1					
7 6	0.05	50							1	1	10	14	6	5	5	1						
TOTAL	0.15	128							1	4	14	20	17	24	7	1	3	2				



TABLE C17:  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TANK DESIGN PHASE  
FOR DATA ACQUIRED AT  
CAMDEN AFB, NEW MEXICO

CU-FU BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)															
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10
1 4	0.30	304										0	17	21	100	200	20	4
1 8	0.30	600											0	0	500	500	7	1
1 4	11.17	104										0	0	13	23	97	5	1
TOTAL	25.00	1004										0	20	37	502	970	32	6

TABLE C17:  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TANK-OFF THE DESIGN PHASE  
FOR DATA ACQUIRED AT  
CAMDEN AFB, NEW MEXICO

CU-FU BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)															
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10
1 4	0.30	307									1	1	10	30	57	91	40	25
1 8	0.30	799									1	3	7	37	210	347	100	11
TOTAL	1.37	1046									2	4	20	70	297	490	141	36

TABLE C17:  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING GEAR DESIGN PHASE  
FOR DATA ACQUIRED AT  
CAMDEN AFB, NEW MEXICO

CU-FU BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)															
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10
3 4	1.20	623												0	44	213	300	30
TOTAL	1.20	623												0	44	213	300	30

TABLE C17:  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING GEAR DESIGN PHASE  
FOR DATA ACQUIRED AT  
CAMDEN AFB, NEW MEXICO

CU-FU BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)															
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10
3 4	0.10	90												0	0	27	20	11
TOTAL	0.10	91												0	0	27	21	11



TABLE C10  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
FOUR-AND-ONE HALF BATTERY PHASE  
FOR DATA ASSUMED AT  
CAMBRIA AFB, TEXAS

CD-FU BLOCK	BLOCK TYPE (HBL)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.5	0.7	0.8	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 7	0.75	323					2	2	4	21	70	130	144	70	10	9						
1 8	0.20	2000							10	60	202	500	571	342	80	11	3	2				
1 9	0.20	300							7	17	80	120	150	90	10	4						
1 10	0.20	302							1	0	20	73	60	30	75	50	20	5				
TOTAL	1.00	3422					2	3	21	100	324	740	600	600	170	30	8	2				

TABLE C10  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT BATTERY PHASE  
FOR DATA ASSUMED AT  
CAMBRIA AFB, TEXAS

CD-FU BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																		
			0.0	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 7	0.10	60							2	17	15	16	13	6							
1 8	0.20	242					5	10	11	37	60	51	30	14	9	5	4				
1 9	0.10	60						1	4	12	14	20	10	4	1						
1 10	0.05	20							1	4	7	6	3	3							
TOTAL	0.50	400					5	11	10	70	70	90	60	20	10	5	4				



TABLE C19a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
CHAMBLEY AB, FRANCE

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.70	2949							2	27	320	816	1807	293	19	3	1	1				
4 10	1.42	2									1	1										
TOTAL	10.12	2951							2	27	320	817	1808	293	19	3	1	1				

TABLE C19b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
CHAMBLEY AB, FRANCE

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
4 10	0.65	700						1	3	10	90	206	259	91	27	3						
TOTAL	0.65	700						1	3	10	90	206	259	91	27	3						

TABLE C19c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
CHAMBLEY AB, FRANCE

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.63	437							1	10	13	164	134	54	20	2						
TOTAL	0.63	437							1	10	13	164	134	54	20	2						

TABLE C19d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
CHAMBLEY AB, FRANCE

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.05	53				3		2	1	4	7		9	11	9	3	2	2				
TOTAL	0.05	53				3		2	1	4	7		9	11	9	3	2	2				



TABLE C300  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN PHASE  
FOR DATA OBTAINED AT  
CHARLESTON AIRPORT, SOUTH CAROLINA

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 4	0.20	204										80	120	6									
1 5	0.83	221										3	120	90	2								
1 6	7.03	60											40	10									
1 7	0.36	1											1										
3 4	4.61	20											4	10									
4 9	0.64	40											14	25	1								
TOTAL	24.95	582										3	273	267	9								

TABLE C301  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN PHASE  
FOR DATA OBTAINED AT  
CHARLESTON AIRPORT, SOUTH CAROLINA

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																					
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 4	0.26	130								1	3	15	50	50	10	3								
1 5	0.33	100								1	3	10	50	69	23	2	2							
1 6	0.41	270			2		1			2	8	30	100	50	40	10	6	2	1	1				
4 9	0.49	360								3	2	30	130	132	63	6	2							
TOTAL	1.49	940			1		1			3	13	66	340	313	140	27	10	2	1	1				

TABLE C302  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT PHASE  
FOR DATA OBTAINED AT  
CHARLESTON AIRPORT, SOUTH CAROLINA

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	0.63	570						3	6	90	90	147	183	75	22	5	5			1		
1 6	0.36	304					2		1	19	43	107	113	52	0	10	2	1				
3 4	0.95	393									22	153	162	75	1							
TOTAL	2.14	1321					2	3	7	76	161	407	420	187	31	15	7	1	1			

TABLE C303  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT PHASE  
FOR DATA OBTAINED AT  
CHARLESTON AIRPORT, SOUTH CAROLINA

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	0.05	43					1	3	3	7	0	4	7	3	3	3	1	3		1		
1 6	0.05	30						1	1	9	3	3	3	7		2	2	1				
3 4	0.05	26								1	1	7	7	5	1	2						
TOTAL	0.15	99					1	4	4	15	12	14	17	15	4	7	3	4		1		



TABLE C21a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
CLARK AB, PHILIPPINES

CD-PU BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 2	0.10	210										9	100	90									
1 3	0.10	200										1	120	101									
1 4	0.10	203										7	85	200	10								
1 5	0.10	200										1	5	70	250	10							
1 7	0.10	10											5	11									
1 8	03.20	2091								1	7	85	940	1111	80		9	2	1				
2 2	0.10	91										4	31	40									
2 4	17.40	60											15	10									
2 5	0.10	471										1	70	101	250	10							
2 6	10.70	851										2	11	314	400	35							
2 9	0.10	10												10	12								
2 10	0.10	13												6	7								
3 3	11.70	137												40	60								
3 4	20.77	400												19	220	250	11						
3 8	20.00	900										8	15	351	373	90		11		4			
4 4	10.01	220												6	90	120							
5 4	10.30	137												1	71	60							
5 5	10.35	201												2	141	147							
6 4	7.51	310												6	150	150							
7 4	10.70	190												12	54	82							
7 7	1.00	120													30	90							
7 8	1.04	267												15	106	164							
TOTAL	000.00	8100									1	10	202	3270	4160		317	27	7	7			

TABLE C21b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
CLARK AB, PHILIPPINES

CD-PU BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 6	0.07	341				1		2		7	20	120	120	60	20	6	2	2					
1 8	0.11	2291				2	17	23	70	107	150	907	600	317	150	60	35	10			1	1	
2 8	0.30	1072					4	15	33	99	110	173	270	170	60	35	17	6					
2 9	0.67	900					1	7	4	16	60	152	170	60	10	1							
2 10	0.76	620					4	6	10	40	111	150	141	100	40	20	7						
3 7	0.47	237								6	10	110	60	11	1								
3 8	1.05	1400				1	3	10	17	40	60	171	321	345	270	120	40	20	13	2	1		
5 8	1.27	1150					2	9	17	30	62	131	200	300	190	61	33	25	12	2	2		
6 9	1.71	717					1	1	9	15	30	90	210	200	100	27	17	6	7				
7 7	0.59	672					2	4	8	25	40	17	100	140	93	50	21	8	5	1			
7 8	0.47	591						4	3	10	20	70	120	150	70	27	11	6	6				
TOTAL	15.00	9670				1	11	67	142	294	495	1952	2270	2515	1404	501	200	125	63	6	4		

TABLE C21c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
CLARK AB, PHILIPPINES

CD-PU BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.10	900				1	1	6	11	30	104	237	270	107	45	14	0	4				
1 3	0.10	1000				2	17	7	50	83	104	263	304	270	89	30	15	21		1		
1 4	0.10	1000					3		12	39	59	220	487	324	150	24	22	9	6			
2 2	0.05	374							5	22	65	64	87	87	34	0	1	1				
2 4	0.10	804						1	0	0	40	140	208	305	120	40	0	3				
2 5	0.10	1091				2	4	17	20	40	100	205	270	129	45	20	10	9				
3 3	0.10	805					2	6	22	40	139	240	109	121	61	14	7	3		2		
3 4	0.10	1000				1	16	30	69	120	410	740	882	397	150	94	20	10				
4 4	0.10	1377							1	17	100	210	370	400	90							
5 4	0.10	1057				6	1	15	10	37	104	204	300	221	72	21	0	6		1		
7 4	0.10	1000						2	6	11	67	193	379	400	244	69	32	4				
TOTAL	22.07	10970				6	7	45	110	302	720	1500	2670	4005	2700	270	112	60	13	0		

TABLE C21d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING BRACKET MISSION PHASE  
FOR DATA ACQUIRED AT  
CLARK AB, PHILIPPINES

CD-PU BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 2	0.10	94																					
1 3	0.10	111																					
1 4	0.10	90																					
2 2	0.10	33																					
2 4	0.10	127																					
2 5	0.10	64																					
3 3	0.10	107																					
3 4	0.10	100																					
4 4	0.10	95																					
5 4	0.10	110																					
7 4	0.10	98																					
TOTAL	1.10	1074																					



TABLE C12  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TANK DESIGN PHASE  
FOR DATA RECEIVED AT  
CLASSIFIED

CU-FU BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																								
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 0	0.42	199														2	09	00									
2 0	7.29	116														1	2	95	00								
TOTAL	13.09	275														1	4	104	100								

TABLE C13  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TANK-OUT RUN DESIGN PHASE  
FOR DATA RECEIVED AT  
CLASSIFIED

CU-FU BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																								
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 0	0.42	301									2	9	29	71	00	99	99	99	99	99	99	99	99	99	99	99	
TOTAL	0.42	301									2	9	29	71	00	99	99	99	99	99	99	99	99	99	99	99	

TABLE C14  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT DESIGN PHASE  
FOR DATA RECEIVED AT  
CLASSIFIED

CU-FU BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																								
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 0	0.09	609																									
TOTAL	0.09	609										2	14	71	299	294	00	22	1								

TABLE C15  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT DESIGN PHASE  
FOR DATA RECEIVED AT  
CLASSIFIED

CU-FU BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																								
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0		
3 6	0.09	50																									
TOTAL	0.09	50																									



TABLE C314  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
CLINTON-SHERMAN AFB, OKLAHOMA

CD-PU BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.1	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 3	00.11	9421							2	10	133	2191	2000	154	9	6							
1 4	07.03	6130					1	2	4	19	227	2970	4461	306	39	10	1						
1 5	09.21	0910						1	1	10	200	3050	4169	245	17	2		1					
1 6	09.00	1300									12	900	720	14									
1 7	09.04	074									9	200	621	14									
TOTAL	000.05	24077					1	3	7	33	509	9653	12000	823	63	10	5	1					

TABLE C320  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
CLINTON-SHERMAN AFB, OKLAHOMA

CD-PU BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.1	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 3	1.70	909							16	31	305	301	135	20	4	1							
1 4	2.02	1021					1	1	0	0	00	000	000	191	19	7							
1 5	2.00	1077							2	9	06	310	500	270	32	5							
1 6	0.77	201					2	1	1	5	43	200	212	55	7	1							
1 7	0.47	227									0	04	101	35	1								
TOTAL	0.15	4409					1	2	2	11	30	202	1403	1000	642	70	17	1	1				

TABLE C321  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
CLINTON-SHERMAN AFB, OKLAHOMA

CD-PU BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.1	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 3	2.00	1900							3	34	155	540	619	176	40	7	6						
1 4	0.04	3100					2	3	2	23	72	304	1090	1059	402	174	21	3					
1 5	0.03	4000						2	0	32	100	921	1253	1261	579	160	30	3	3				
1 6	0.70	1267							0	21	05	171	270	245	162	73	33	12	2				
1 7	1.17	573							2	4	16	76	202	105	63	1	6	2	1				
TOTAL	05.47	10900					2	5	20	60	377	1307	3300	3300	1302	3	97	26	6				

TABLE C324  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-DOWN ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
CLINTON-SHERMAN AFB, OKLAHOMA

CD-PU BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.1	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 3	7.00	5200					0	20	113	306	053	1270	1270	870	416	110	30	0	1				
1 4	0.24	7074					2	4	10	61	202	436	1129	1000	1777	1347	602	220	75	31	5		
1 5	0.40	7307					5	20	40	197	611	957	1097	1001	1227	499	176	71	23	4			
1 6	1.00	1000					1	3	10	23	04	219	454	409	293	164	47	10	1				
1 7	12.11	10912						3	13	50	134	1036	1036	1036	1001	429	00	37	0				
1 8	12.02	10003						4	10	90	370	1000	1100	3300	1700	525	117	25	7				
1 9	13.75	10000					1	4	10	60	360	1304	1704	4106	2133	505	121	27	0				
1 10	0.31	201							1	2	71	00	05	64	1								
TOTAL	05.04	50300					3	10	60	161	601	2500	7007	10415	16000	9203	3195	902	261	07	14	4	

TABLE C325  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
CLINTON-SHERMAN AFB, OKLAHOMA

CD-PU BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.1	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	1.20	070				2	2	0	23	00	136	102	171	132	70	60	13	10	0	2		
1 4	0.00	1001				0	7	10	57	100	100	313	200	174	100	60	31	17	7	2	1	
1 5	1.04	1000				1	0	20	00	107	000	222	171	00	00	30	14	5	5			
1 6	0.30	277						3	0	10	50	72	07	30	10	0	0	1				
1 7	1.71	1300				1	10	10	20	111	105	200	210	200	91	00	24	10	0	3	1	
1 8	1.00	1460				2	3	10	30	97	274	300	320	204	114	53	19	11	1	1		
1 9	1.07	1700				3	2	0	31	101	200	376	420	270	104	00	13	12	2	1		
1 10	0.05	70								7	10	7	0	1	1							
TOTAL	10.29	6000				1	15	32	04	214	610	1100	1000	1000	1237	641	310	104	04	20	14	2



TABLE C34  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAXI RESIDUE PHASE  
FOR DATA ACQUIRED AT  
DALLAS LOVE FIELD, TEXAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																							
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 5	0.32	142																								
TOTAL	0.32	142												2	72	27	2									

TABLE C34  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAXI-OFF RUN RESIDUE PHASE  
FOR DATA ACQUIRED AT  
DALLAS LOVE FIELD, TEXAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																							
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 5	0.30	199																								
TOTAL	0.30	199																								

TABLE C34  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT RESIDUE PHASE  
FOR DATA ACQUIRED AT  
DALLAS LOVE FIELD, TEXAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																						
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	0.54	303									1	1	7	34	122	110	10	5	2		1				
TOTAL	0.54	303									1	1	7	34	122	110	10	5	2		1				

TABLE C34  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT RESIDUE PHASE  
FOR DATA ACQUIRED AT  
DALLAS LOVE FIELD, TEXAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																						
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	0.00	20				1		2	4	2	2	2	1	1			6	2	2	1	1		1		
TOTAL	0.00	20				1		2	4	2	2	2	1	1			6	2	2	1	1		1		



TABLE C24  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
DANANG AB, VIETNAM

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	7	11.89									2	9	14									
1	8	0.64																				
2	8	3.97			1				1	2	1	6	3	2	3							
4	6	13.64										37	79									
5	6	5.23							1	2		33	3	1								
TOTAL	35.37	200			1				2	4	3	85	99	3	3							

TABLE C25  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
DANANG AB, VIETNAM

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	7	0.30						1	7	22	68	15	71	23	5							
4	6	0.53		1					2	8	77	133	147	76	25	2					1	
TOTAL	1.0	634		1				1	9	30	95	148	218	99	30	2					1	

TABLE C26  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
DANANG AB, VIETNAM

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2	8	0.66						5	6	14	61	113	119	43	13	3	3	1				
5	6	1.08					1	2	21	59	186	231	187	77	29	5	1	6	1	1		
TOTAL	1.74	1188					1	7	27	73	247	344	306	120	42	8	4	7	1	1		

TABLE C27  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
DANANG AB, VIETNAM

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2	8	0.05					1	1		4	9	12	17	6	1							
5	6	0.05									1	1		4	2	1	2	7	1	2	2	
TOTAL	0.10	74					1	1		4	10	13	17	10	3	1	2	7	1	2	2	



TABLE C265  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
DODDINS AFB/MAS, GEORGIA

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 3	3.02	28										3	23										
1 4	0.40	970									29	295	247	7									
1 5	0.14	832									3	379	450	32									
1 6	9.43	301									5	140	200	26									
TOTAL	29.00	1819									37	817	890	64	2								

TABLE C266  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
DODDINS AFB/MAS, GEORGIA

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.31	199							2	32	64	50	31	9	2	1						
1 5	0.37	156							2	8	44	80	21	1								
1 6	0.40	263						1	5	9	35	84	62	39	22	4	1					
TOTAL	1.08	618						1	5	13	75	193	200	91	32	6	2					

TABLE C267  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
DODDINS AFB/MAS, GEORGIA

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.55	260								3	14	75	136	29	3							
1 5	0.50	361						1		8	42	143	110	46	8	1	1	1				
1 6	0.51	421						1	4	24	64	80	135	77	21	2	3	3	1			
TOTAL	1.56	1042						2	4	35	120	304	301	152	32	3	4	1				

TABLE C268  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
DODDINS AFB/MAS, GEORGIA

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.09	53								3	8	15	15	8	4							
1 5	0.09	60						1	9	12	12	10	11	8	3							
1 6	0.09	64						2	11	7	10	9	8	7	6	3	1					
TOTAL	0.15	177						3	17	27	37	34	27	19	9	3	1					



TABLE C17a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
DON MUANG AFB, BANHOM, THAILAND

CU-PH BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	2.20	143										30	96	9								
1 8	4.00	4										3	1									
1 9	6.73	13										13										
2 8	8.47	0																				
2 9	8.93	0																				
3 4	7.90	41										22	10									
3 5	8.75	102								1	17	25	33	3	1							
3 9	7.91	240									2	124	130	4								
4 5	3.62	0																				
6 7	3.57	626									10	269	313	32	2							
TOTAL	60.14	1189								1	29	494	614	40	3							

TABLE C17b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
DON MUANG AFB, BANHOM, THAILAND

CU-PH BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 8	0.49	466					2	3	19	30	69	99	113	64	39	17	5	2				
1 9	1.04	876					3	5	15	41	131	254	225	100	57	22	9	4				
2 8	0.33	400								3	50	167	101	84	3							
3 9	0.57	610					11	20	38	52	105	70	105	90	70	34	25	9	1			
TOTAL	2.67	2400					16	30	72	144	355	392	626	346	149	73	39	15	1			

TABLE C17c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
DON MUANG AFB, BANHOM, THAILAND

CU-PH BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																					
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0		
1 4	0.49	505						1	7	35	55	135	95	113	72	25	6		1					
3 4	0.57	359								3	17	127	154	32	4									
3 5	0.67	777					3	9	6	35	19	54	64	132	50	126	113	69	47	24	15	4	5	1
4 5	0.66	250								5	41	103	80	16	1	4								
6 7	0.69	705						2	6	16	39	60	64	126	149	86	77	30	10	13	5			
TOTAL	3.08	2694					3	9	8	41	96	102	169	351	341	374	157	223	106	60	20	17		

TABLE C17d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING TAPER MISSION PHASE  
FOR DATA ACQUIRED AT  
DON MUANG AFB, BANHOM, THAILAND

CU-PH BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.05	60				2	1	1	5	7	7	7	2	7	6	7	1	5	2			
3 4	0.05	26							1	4	5	4	3	3		1		3	1			
3 5	0.05	50							2	2	15	7	3	1	4		2	3	1			
4 5	0.05	32				1	1		4	5	8	10	6	4	2	1	4	4	2			
6 7	0.05	42						3	4	6	6	4	2	1	1	2	4	3	1	2	2	
TOTAL	0.25	250	1	1	1	3	5	9	12	24	40	32	16	22	13	19	11	10	7	2	2	



TABLE C19  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
DUVER AFB, DELAWARE

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	73.93	1264							1	3	46	302	482	78								
1 3	796.99	9476					1	4	10	48	303	3106	3376	195	30	10		1	3			
1 4	111.49	8981					1	2	8	20	241	3497	4700	299	28	3		1				
1 5	111.50	10915							3	33	326	3994	3473	416	64	4						
1 6	709.68	34281						1	9	117	1169	14234	19204	1402	118	73	9	2		1		
1 7	382.90	11794							7	73	481	5367	7887	591	45							
1 8	96.87	1212								1	17	482	691	20								
1 10	36.28	2055								1	74	749	1101	48								
2 3	13.37	87									3	34	44	6								
2 4	9.77	64										23	34	3	1				1			
2 7	13.46	483									4	219	254	4								
2 8	7.44	754									11	299	432	11	1							
2 9	16.69	121									4	90	76	1								
2 10	0.36	0																				
3 2	19.06	51										29	27									
3 3	12.17	121									2	53	67	4								
3 4	6.39	16										17	19									
3 6	14.44	208									1	142	154	1								
3 9	29.72	264									2	99	153	10								
3 10	16.75	11										11										
4 1	14.82	169									1	61	101	5	1							
4 8	19.49	222								2	23	99	95	3								
4 9	94.90	465									7	174	275	9								
4 10	16.99	96									6	51	39									
5 9	85.62	1132									34	450	612	34	2							
5 10	28.26	455								1	11	231	204	4								
TOTAL	7445.07	88349						2	7	37	231	2786	34305	47130	1740	326	40	3	4		1	

TABLE C20  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
DUVER AFB, DELAWARE

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	5.42	3153				3	4	6	29	129	314	935	1090	403	161	78	5	4				
1 4	0.90	5144					4	3	23	124	547	1785	1896	647	162	79	5	2				
1 5	9.41	6922				1	7	8	37	194	732	2283	2499	989	190	32	7	3				
1 6	25.73	16030	1	2	3	13	40	114	481	1092	4844	5220	2440	640	176	57	37	4	1			
1 7	10.78	6768				2	10	15	79	271	829	1940	2205	969	173	79	22	12	4			
1 8	3.63	1352							9	39	150	488	463	194	78	8						
1 10	2.97	1939			2		1	7	13	39	116	231	448	466	153	164	57	25	6	5	2	2
2 1	0.34	231							1			79	115	27	1							
2 7	0.79	718						3	4	27	84	235	227	72	52	18	1					
2 8	0.41	517						1	4	28	19	161	126	77	47	11	1	1				
2 9	1.13	215						1	1	3	5	21	91	90	15	7						
3 4	0.43	274								5	25	97	100	41	3	2	1					
3 9	1.24	627							3	10	45	211	257	74	8	3	1					
3 10	0.64	421				1		1	5	9	68	188	168	60	4			2				
4 8	0.47	263							6	7	34	64	94	28	5	1						
4 9	3.89	2274			2		3	5	13	41	263	651	735	404	92	23	12	4	2			
4 10	0.97	243						1	2	4	26	98	92	36	1	4						
5 9	4.80	3173				2	7	8	24	76	178	934	1164	523	84	25	4	3	1			
5 10	0.70	640						6	7	36	129	174	204	83	14	2	2	2				
TOTAL	80.75	50716	3	4	13	72	137	484	1602	5844	15510	17178	7164	2088	499	144	71	16	3	3		

TABLE C20c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
DUVER AFB, DELAWARE

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	4.99	2093				1	2	4	15	75	260	641	640	315	99	18	7	5	1			
1 3	26.84	13078			2	2	20	38	191	427	1374	3093	4430	1445	519	130	60	43	15	2	1	
1 4	32.73	18764			3	5	34	69	192	613	2162	5779	6319	2040	716	231	104	62	12	4		
1 5	26.39	20120			4	20	77	134	383	983	2479	3489	6042	2040	1004	365	163	132	43	23	1	
1 6	23.60	18048			1	3	48	104	326	978	2479	3089	5165	2000	1009	411	178	107	11	3		
1 7	1.15	716					2	2	9	25	62	178	268	109	33	22	8					
2 1	0.66	483							1	4	34	181	148	30	1			1				
2 4	1.28	927					3	3	15	37	81	260	249	174	71	24	6	3	1			
3 2	1.38	393							1	18	62	196	183	32	4	2						
3 3	0.74	196				1	3	1		7	21	48	56	14	1	4	1					
3 4	0.51	169								3	11	59	69	23	2	1						
4 3	1.06	580							1	2	12	75	164	288	80	26	5	4	1	7		
TOTAL	121.37	76091			10	32	191	360	1135	3887	9864	21968	23938	10438	3620	1239	536	356	85	12	7	



TABLE C204  
DISTRIBUTION OF GROUPED LOAD FACTORS  
FOR THE  
TOUCH-AND-GO BALL REISSUE PHASE  
FOR DATA ACQUIRED AT  
OVER AFB, DELAWARE

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.40	305							4	22	50	110	70	83	20		2					
1 4	0.11	3205				1	4	31	50	115	274	495	604	575	530	310	160	67	74	10	4	
1 5	0.37	3367				3	4	34	51	124	263	453	607	662	545	316	130	66	17	1		
1 6	0.01	3507						34	55	110	242	517	770	794	640	233	123	45	13	7	1	
2 3	0.42	467						3	15	23	40	71	60	54	40	34	11	1				
TOTAL	13.14	10991		1	4	10	102	179	305	649	1604	2295	2073	1970	927	461	180	57	10	6		

TABLE C205  
DISTRIBUTION OF GROUPED LOAD FACTORS  
FOR THE  
LANDING IMPACT REISSUE PHASE  
FOR DATA ACQUIRED AT  
OVER AFB, DELAWARE

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 2	0.43	229				1	2		3	10	31	61	42	20	21	6	4		1				
1 3	1.04	1093			7	6	18	30	51	95	144	104	147	150	133	55	37	47	17	9			
1 4	3.10	2413			4	16	52	50	111	226	343	421	357	330	233	93	60	66	27	12	2	2	
1 5	2.40	2471			2	8	9	46	69	125	224	344	303	355	352	227	123	71	79	31	15	4	
1 6	2.64	2109				5	36	47	90	170	296	482	307	299	176	115	59	53	14		3		
1 7	0.05	32					2	1	4	2	6		6	1	3	2	2	1					
2 3	0.20	182						1	6	16	29	40	30	20	2	8	4						
2 4	0.10	76						2	1	7	1	73	27	10	11	6	7	1	1				
3 2	0.10	42						1	1	4	2	0	9	3	6	1	2	1	2				
3 3	0.04	44								10	7	2	9	6	6	4	2	1					
3 4	0.35	36							1		7	13	0	4	2	3		1					
4 3	0.10	79							1	0	5	11	12	19	9	8	3	2	1				
TOTAL	11.21	8832		4	2	20	35	140	204	410	700	1251	1551	1299	1234	795	410	240	271	90	44	14	2



TABLE C18  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
EDWARDS AFB, CALIFORNIA

CM-PW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1	3	5.51										10	30	0									
4	3	7.09										3	3										
TOTAL	12.60	62										13	41	0									

TABLE C19  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
EDWARDS AFB, CALIFORNIA

CM-PW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 3	0.23	89										37	47	4	1								
TOTAL	0.24	89										37	47	4	1								

TABLE C20  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
EDWARDS AFB, CALIFORNIA

CM-PW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
4	3	0.91						1	5	9	11	93	75	34	13		1					
TOTAL	0.91	200						1	5	9	11	93	75	34	13		1					

TABLE C21  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
EDWARDS AFB, CALIFORNIA

CM-PW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
4	3	15							2	4	5	2	11	7	2	2						
TOTAL	0.04	14							2	4	5	2	11	7	2	2						



TABLE C30:  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
ELMENDORF AFB, ALASKA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 3	7.07	191										26	162		3								
1 4	20.08	682								1	14	304	278		13								
1 5	4.03	9										1	8										
1 6	17.04	107									2	70	109		4								
1 10	5.74	71										7	64										
1 10	6.04	79										12	17										
2 3	11.77	5										1	4										
2 4	14.30	0																					
2 8	7.04	30										1	11										
2 10	21.14	134										5	47				1						
3 3	25.11	1004								1	11	430	504		35		1						
3 4	25.01	16										5	13										
3 6	16.39	130										9	60		3								
3 10	21.30	103											21										
3 10	33.26	204										2	66		2								
4 3	25.39	120										1	48		9		1						
4 4	4.32	19											10										
4 6	9.14	40											27										
4 10	63.43	2018																					
5 2	22.76	70									5	26	78	621	870	301	66	25	3	3		1	
5 3	20.04	14											5		15								
5 4	11.04	15											7		12								
5 6	12.19	111											16		19								
5 10	94.63	304											34		57								
6 4	8.46	8											2	117	182		3						
TOTAL	494.19	9502									6	26	145	2050	2046	370	69	25	3	1		1	

TABLE C31:  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
ELMENDORF AFB, ALASKA

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																					
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 2	1.46	646					1	1		3	26	230	201	95	9		1	1						
1 9	0.40	266								1	2	54	171	36	2									
1 10	0.61	300								11	7	152	100	42	3	1	1							
2 0	0.50	291					1			1	10	106	124	35	5									
2 10	1.67	694							1	10	119	166	297	91	7	2	1	1						
3 0	1.17	955							1	7	57	172	230	100	5	2								
3 9	1.56	660								4	32	174	330	117	2	2		1						
3 10	2.34	1023						11	26	76	198	574	615	177	115	29	2	1						
4 0	0.45	100									6	60	92	20	3									
4 10	3.91	2555					2	6	35	91	274	949	897	330	180	66	19	7						
5 0	0.76	417							1	1	55	151	106	42	3									
5 10	6.39	2792				1	1	4	22	67	226	1065	1661	4506	1325	270	66	16	11	2	1	1		
TOTAL	19.43	11209				1	1	4	22	67	226	1065	1661	4506	1325	270	66	16	11	1	1			

TABLE C32:  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
ELMENDORF AFB, ALASKA

CM-FW BLOCK NUMBER	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 3	2.16	691									4		235	415		21	4	2					
1 4	4.36	2094							4	6	44	717	771	763		211	76	16	5	1			
1 5	1.27	246										15	85	113		6	5						
2 3	1.59	81										6	30	39		1	2	1	1				
2 4	1.97	307										1	122	160		15	1	2	1	1			
3 3	2.36	1150							4	9	60	176	305	421		120	46	15	3	1			
3 4	1.59	1120								2	3	19	471	566		77	12	1	1	2			
4 3	4.51	1700								2	15	79	919	640		110	19	7	7	1			
4 4	1.36	84										17	25	42									
5 2	1.92	963								3	15	95	303	300		121	24	3					
5 3	2.35	609								2	4	77	123	201		137	17	6	2				
5 4	2.47	610								2	4	47	262	292		41	1			1			
5 6	0.94	331										71	126	104		16	1	1					
6 4	0.60	273										71	64	131		47	6	1	1				
TOTAL	31.53	9917							5	26	166	697	1561	4299		925	233	50	15	7			

TABLE C33:  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
ELMENDORF AFB, ALASKA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.13	97					1	3	2	7	16	19	19		15	7	5	3	1	1		
1 4	0.25	194					3	2	7	20	17	30	42		25	15	9	2	4	1		
1 5	0.75	24									4	7	7		4	1	1					
2 3	0.10	73									1	10	4		5	3						
2 4	0.15	101									1	12	25		24	15	7	4	1			
3 3	0.15	120					1	3	3	3	7	10	25		23	20	5	4	1	2	1	
3 4	0.25	160					2		2	3	6	12	39		56	29	12	2	1	3	2	
4 3	0.25	154							1		7	32	59		32	22	9	10	1	1		
4 4	0.05	20									1	6	5		9	4	1					
5 3	0.17	109						1	3	5	3	26	24		21	10	8	6	3		1	
5 4	0.10	70							1		7	24	9		5	16	5	6	4			
5 6	0.06	35									1	11	17		11	2	4	2	3	1		
5 9	0.04	32							2		4	4	4		3	4	3	3				
6 4	0.05	35									1	8	12		3	6	3					
TOTAL	1.00	1204					3	9	17	22	73	190	273		259	162	60	54	25	21	6	2



TABLE C31a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
FORD'S AFB, KANSAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.44	800										11	311	427	51							
TOTAL	0.44	800										11	311	427	51							

TABLE C31b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
FORD'S AFB, KANSAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.72	441				1			3	11	57	126	127	100	10	3	2	1				
TOTAL	0.72	441				1			3	11	57	126	127	100	10	3	2	1				

TABLE C31c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
FORD'S AFB, KANSAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	2.1	1390					1	3	6	10	194	462	490	197	75	0	4					
TOTAL	2.1	1390					1	3	6	10	194	462	490	197	75	0	4					

TABLE C31d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-DOWN ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
FORD'S AFB, KANSAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.25	141						9	13	26	17	23	29	14	0	2						
1 3	0.27	247					1	8	3	12	30	64	32	57	20	9	2	1				
1 4	1.30	1139			1	2	11	27	72	91	160	179	167	199	100	79	33	14	4			
1 5	0.34	307						4	9	27	86	59	85	26	6	2	1					
1 7	1.79	1161					1	3	14	41	124	315	350	210	69	22	9	3				
1 8	6.23	4909					1	10	26	99	474	1471	1530	643	219	27	0	1				
1 9	4.67	3594				1	1	4	20	94	336	1164	1234	546	157	25	11	1				
TOTAL	14.94	11093			1	3	15	67	140	399	1207	3206	1875	1769	605	176	67	21	4			

TABLE C31e  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
FORD'S AFB, KANSAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.05	24					1	2	1	2	2	2	3	4	2		1	2		2		
1 3	0.05	28					1			3	5	1	2	9	2		1	1				
1 4	0.35	284			1		7	9	17	17	32	27	33	29	29	16	12	4	2	1		
1 5	0.05	90					2		2	2	4	3	3	4	4	2	2					
1 7	0.20	159					1	2	4	9	17	35	27	30	13	4	3	7	2	1		
1 8	0.40	941			1		7	6	11	27	63	149	124	70	33	20	10	9	1	7		
1 9	0.55	403				1	1	3	11	33	50	95	69	60	31	19	11	0	2	1		
TOTAL	2.05	1610			2	1	20	22	66	95	162	312	261	214	114	65	40	31	7	7	1	



TABLE C32a  
DISTRIBUTION OF GROUPS LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
FT. SMITH HUNT, ARKANSAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	0.0	0.3	0.5	0.6	0.7	0.75	0.80	1.00	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.71	10										6	10									
1 3	31.25	111								1	5	50	50	2								
1 4	11.45	369										120	221	14								
1 5	0.62	279								1	5	110	106	5	1							
TOTAL	31.93	729								2	10	295	307	21	1							

TABLE C32b  
DISTRIBUTION OF GROUPS LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
FT. SMITH HUNT, ARKANSAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	0.0	0.3	0.5	0.6	0.7	0.75	0.80	1.00	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.36	130								2	3	34	63	15								
1 3	0.75	243					2		5	10	34	65	75	44	8	6	3	1				
1 4	0.31	296					2		4	10	34	75	99	44	20	5	4	1				
1 5	0.32	131									3	39	70	10		1						
TOTAL	1.74	600					4		9	31	64	231	290	121	29	12	7	2				

TABLE C32c  
DISTRIBUTION OF GROUPS LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
FT. SMITH HUNT, ARKANSAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	0.0	0.3	0.5	0.6	0.7	0.75	0.80	1.00	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.51	412				3	6	9	13	20	50	113	69	64	23	10	5	2				
1 4	0.03	792			1	1	4	4	14	29	1.9	213	245	120	29	7	6	2				
1 5	0.30	212								9	34	69	42	40	15	3						
TOTAL	1.02	1416			1	4	10	13	27	50	201	396	376	241	64	20	11	4				

TABLE C32d  
DISTRIBUTION OF GROUPS LOAD FACTORS  
FOR THE  
TOUCH-DOWN ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
FT. SMITH HUNT, ARKANSAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.40	237						1	11	20	29	47	45	44	20	17	3					
1 3	0.03	750			4	11	16	25	22	37	53	115	94	106	105	56	31	32	26	16	5	
1 4	3.29	6092	1	15	63	105	226	257	305	566	856	772	863	931	665	404	300	276	87	35	8	
1 5	0.03	605			3	4	14	16	36	77	72	76	110	80	51	21	6	7				
1 6	0.17	294			1	1	3	4	13	23	46	67	62	39	29	9	2	1				
1 8	0.03	1197			1	1	53	35	67	115	169	292	225	157	101	52	25	12	1			
1 9	0.04	1196					8	10	30	119	234	255	316	175	64	17	7					
TOTAL	0.51	11169	1	10	79	127	309	343	571	957	1504	1512	1756	1522	966	631	365	322	104	40	8	

TABLE C32e  
DISTRIBUTION OF GROUPS LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
FT. SMITH HUNT, ARKANSAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 2	0.10	43							1	1	7	7	11	8	3	2	3						
1 3	0.25	222			1	1	5	9	3	12	19	20	37	24	39	15	12	6	8	3	1	3	
1 4	1.05	1053			1	7	10	34	66	96	148	173	163	167	96	48	35	20	3				
1 5	0.15	90						4	3	2	17	20	25	15	4	9	1	2	1				
1 6	0.05	20			2		3	1	3	1	1	3	6	3	1	1	1	1	1	1	1		
1 8	0.20	100					2	4	3	20	32	50	37	22	10	4	2	5	2	1	1		
1 9	0.20	214			1	1	4	10	11	20	30	31	43	20	22	8	7	5	2	1			
TOTAL	2.00	1647			1	9	13	26	56	79	167	270	301	304	282	159	64	53	44	9	2	4	



TABLE C33a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF PHASE  
FOR DATA ACQUIRED AT  
GOSF BAY, LABRADOR

CU-PH BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	0.03																				
TOTAL		0.03												5	9	2						

TABLE C33b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT PHASE  
FOR DATA ACQUIRED AT  
GOSF BAY, LABRADOR

CU-PH BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.15	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	0.07					1		3	9	16	121	117	33	6		1	1				
TOTAL		0.07					1		3	9	16	121	117	33	6	1	1	1				

TABLE C33c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT PHASE  
FOR DATA ACQUIRED AT  
GOSF BAY, LABRADOR

CU-PH BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	0.05								2	0	10	3	6	3							
TOTAL		0.05								2	0	10	3	6	3					1		



TABLE C34a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN PHASE  
FOR DATA ACQUIRED AT  
GREATER SOUTHWEST INTL. TEXAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 5	17.50	402									2	195	205	2									
1 6	11.75	167								2	0	51	250	207	54	0			1				
1 7	7.82	77										50	27										
TOTAL	37.10	1046								2	0	91	483	437	56	4			1				

TABLE C34b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
GREATER SOUTHWEST INTL. TEXAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	0.63	300					2		1	0	23	97	120	34	12		1	1				
1 6	0.30	137							2	5	16	31	18	30	11	7						
1 7	0.43	110						1	1	4	23	25	14	13	9							
TOTAL	1.40	547					2	1	4	17	62	154	192	77	32	5	1	1				

TABLE C34c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
GREATER SOUTHWEST INTL. TEXAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	1.30	500							1	4	50	239	185	69	6	2						
1 6	0.80	745					1			13	82	244	296	94	11	4						
TOTAL	2.10	1245					1		1	17	140	483	481	163	17	6						

TABLE C34d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-AND-GO ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
GREATER SOUTHWEST INTL. TEXAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.71	191						2		3	27	56	37	46	12	4						
1 6	0.54	200							4	10	50	29	43	45	14	3						
1 8	0.37	305								4	14	103	89	65	7	2	1					
TOTAL	1.62	696						2	4	17	111	188	169	156	33	9	1	4				

TABLE C34e  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
GREATER SOUTHWEST INTL. TEXAS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.10	31									11	2	5	6	4	1	1					
1 5	0.10	52								7	10	6	5	9	7	3						
1 6	0.15	61			1		5	1	7	2	5	1	10	9	3	4	5	4		2		
1 8	0.04	42									5	12	4	16	1	2						
TOTAL	0.40	186			1		5	2	11	9	31	21	24	42	15	10	6	7		2		



TABLE C32  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
HICKAM AFB, HAWAII

CU-PN BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 3	10.00	10										0	0										
1 5	1.50	0																					
1 6	5.00	0										7	1										
1 7	0.71	0																					
1 8	6.12	133										51	61	1									
1 10	13.00	0										4	4										
2 3	0.37	462							1	4	2	25	125	260	7								
2 10	0.04	100										50	50	1									
4 4	15.00	69										27	93	4									
5 3	20.00	772									1	23	300	350	3	1							
5 4	20.00	900										3	60	112	5								
5 6	13.07	90											42	50									
7 3	5.20	31										1	13	16	1								
7 4	11.52	61											17	50	6								
7 8	14.07	400																					
TOTAL	150.43	2440							1	4	3	74	990	1229	126	11			1	1			

TABLE C33  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
HICKAM AFB, HAWAII

CU-PN BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	0.35	20										5	21									
1 6	0.47	64										1	20	42	1							
1 8	0.45	221										19	66	97	37		2					
1 10	1.19	553				1	1	4	13	26	60	104	161	70	20	12		4	1			
2 10	0.53	509						4	8	20	70	112	141	76	46	10	7					
5 8	1.24	866				1	4	9	9	20	109	273	263	126	41	9	4	2				
7 8	1.30	1130						4	12	24	90	153	300	210	297	70	37	13	3			
TOTAL	5.46	3177				2	9	25	94	166	425	900	955	553	104	70	28	6				

TABLE C34  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
HICKAM AFB, HAWAII

CU-PN BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																						
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0			
1 3	0.76	57										29	27	1											
1 5	1.29	31										30	21												
2 3	1.04	400							1	3	29	173	244	91	3	5	1								
3 3	0.41	10										5	4	1											
4 4	0.50	214										30	41	61	10	2									
5 3	1.33	849						1	2	10	26	87	201	210	96	20	4	1							
5 4	1.02	429							5	5	14	47	114	151	40	30	13	6	1						
7 3	0.95	446								1	3	9	10	32	96	100	18	17	8	4	9	2			
7 4	0.65	430										2	15	37	129	70	94	13	2	7	9	2			
TOTAL	7.95	2994							1	3	10	73	10	30	90	316	729	904	496	181	78	21	7	9	2

TABLE C35  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
HICKAM AFB, HAWAII

CU-PN BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																								
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0					
1 3	0.05	19										5	9	5													
1 5	0.05	13										1	4	6	2												
2 3	0.05	40										6	7	7	9	2		4	3								
3 3	0.05	12										3	4	2	2	1											
4 4	0.05	54										7	11	0	9	12	4		2								
5 3	0.10	83										1	4	10	23	6	11	7	4	1	1	2	2				
5 4	0.05	44										2	2	4	6	2	16	6	4	2							
7 3	0.05	29										1	3	4	11	1	1	1	1	1	1	1	1				
7 4	0.05	47										1	7	8	10	0	3	1	1	1	1	1	1				
TOTAL	0.59	309										1	1	9	11	20	40	75	75	50	30	15	6	7	5	2	1



TABLE C36a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
HILL AFB, UTAH

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 4	4.49	39										11	20										
1 5	9.92	875								2	23	325	444	92	2								
1 6	11.08	863								2	34	362	421	40	3	1							
5 6	3.04	38										30	0										
7 4	4.47	215										73	137	2									
7 5	7.60	16										7	0										
TOTAL	36.80	1996								4	60	805	1047	74	5	1							

TABLE C36b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
HILL AFB, UTAH

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
5 6	0.53	887				6	25	34	65	72	120	116	145	119	66	64	34	19	2			
7 4	0.57	158								12	73	86	132	50	4	1						
7 5	0.67	548							1	33	104	111	204	80	15							
TOTAL	1.77	1793				6	25	34	66	117	297	313	481	249	85	65	34	19	2			

TABLE C36c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
HILL AFB, UTAH

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.62	407							1	8	47	105	120	99	21	6						
1 5	0.77	354							4	38	114	102	175	70	35	10						
1 6	1.05	643					1	5	12	20	111	193	196	74	20	7	4					
TOTAL	2.44	1604					1	5	19	64	272	400	491	243	76	73	6					

TABLE C36d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
HILL AFB, UTAH

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.05	60						2	3	14	8	7	4	8	5			6	1			
1 5	0.05	38						4	7		8	5	3	2	4			2	1			
1 6	0.09	47					2		3	3	13	3	7	7	2	5			2			
TOTAL	0.19	145					2		9	13	27	19	19	14	12	16			4	7	1	



TABLE C37a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF PHASE  
FOR DATA ACQUIRED AT  
HUNTER AFB, GEORGIA

CM-FW BLOCK	BLOCK TIME	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	3	0.79	7									2	5									
1	6	0.02	399									4	151	241	9							
TOTAL		0.81	406									4	153	246	9							

TABLE C37b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
HUNTER AFB, GEORGIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	0.45	167									2	55	97	13								
TOTAL	0.45	167									2	55	97	13								

TABLE C37c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
HUNTER AFB, GEORGIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	3	0.44								1	2	17	80	121	16	1						
TOTAL	0.44	240								1	2	17	80	121	16	1						

TABLE C37d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
HUNTER AFB, GEORGIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	3	0.05									5	3	10	5	8	5	3					
TOTAL	0.05	39									5	3	10	5	8	5	3					



TABLE C38a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
KADENA AB, OKINAWA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 5	11.60	90									5	39	45	1									
1 6	26.61	567									9	207	336	15									
2 5	7.04	26										12	14										
2 10	7.30	381								1	24	160	158	28	2								
4 3	6.30	78											26										
4 10	5.26	190									2	50	78										
TOTAL	65.15	1232								1	40	488	657	44	2								

TABLE C38b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
KADENA AB, OKINAWA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	0.17	190					3	4	11	39	51	110	87	43	79	8						
1 6	0.43	331						1	2	1	11	109	108	54	12	4						
2 10	0.69	687						5	9	51	119	183	161	89	56	6						
4 10	0.57	441					2		1	8	75	119	140	64	10	1						
TOTAL	2.16	1848					5	12	25	99	277	521	446	243	127	19						

TABLE C38c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
KADENA AB, OKINAWA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	2.68	1418							2	8	37	177	420	525	197	43	9					
2 5	0.90	442								1	12	31	159	172	51	9						
4 3	0.45	347								2	3	28	122	103	69	17	2					
TOTAL	4.23	2207							2	11	52	236	701	800	319	69	15					

TABLE C38d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
KADENA AB, OKINAWA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	0.15	145				2	2	4	7	8	22	20	26	25	8	7	7	6				
2 5	0.05	18						2	4	4	6	4	17	6	3	5						
4 3	0.05	38						1	1	2	7	4	5	4	4	4	1	1				
TOTAL	0.25	281				2	2	7	12	14	35	28	45	39	15	16	8	9				



TABLE C37a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF PHASE  
FOR DATA ACQUIRED AT  
KELLY AFB, TEXAS

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1	6	6.86																					
4	6	6.62																					
TOTAL	13.48	100																					

TABLE C37b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
KELLY AFB, TEXAS

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
4	6	0.44				1			1		12	79	61	37	7			1				
TOTAL	0.44	202				1			1		12	79	61	37	7			1				

TABLE C37c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
KELLY AFB, TEXAS

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	0.83	469								4	30	157	160	81	19	2						
TOTAL	0.33	469								4	30	157	160	81	19	2						

TABLE C37d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
KELLY AFB, TEXAS

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	6	20																				
TOTAL	0.05	20																				



TABLE C40a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
KIMPO INTL ARPT, SEOUL, KOREA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1	5	347								2	33	149	182	28	9								
2	4	386									14	84	142	11									
TOTAL	7.3	640								2	47	233	324	39	9								

TABLE C40b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
KIMPO INTL ARPT, SEOUL, KOREA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
2 8	0.53	407						1	3	23	68	118	125	34	15								
TOTAL	0.41	407						1	3	23	68	118	125	34	15								

TABLE C40c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
KIMPO INTL ARPT, SEOUL, KOREA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1	5	535								8	49	211	223	34	8	2							
TOTAL	1.05	535								8	49	211	223	34	8	2							

TABLE C40d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
KIMPO INTL ARPT, SEOUL, KOREA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	64			1	2	4	6	3	1	5	6	10	6	8	2	3	5	2			
TOTAL	0.05	64			1	2	4	6	3	1	5	6	10	6	8	2	3	5	2			



TABLE C41a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
KINDLEY AFB, BERMUDA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																							
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1	6	2.76										1	20	88	45	5										
1	7	4.31										1	14	90	171	64		1								
TOTAL	7.07	460										2	34	158	216	69		1								

TABLE C41b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
KINDLEY AFB, BERMUDA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																								
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0		
1	7	0.19											1	2	3	23	32	64	64	65	42	22	7	4	2		
TOTAL	0.39	308											1	2	3	23	32	64	64	65	42	22	7	4	2		

TABLE C41c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
KINDLEY AFB, BERMUDA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																						
			0.2	0.3	0.4	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0			
1	6	0.77					1	23	29	37	67	110	56	126	79	55	33	18	10	2	4				
TOTAL	0.77	645					1	23	29	37	67	110	56	126	79	55	33	18	10	2	4				

TABLE C41d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
KINDLEY AFB, BERMUDA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																						
			0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	6	0.09																							
TOTAL	0.09	46									2	4	11	5	3	5	7	5	2	2					



TABLE C42a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
LAJES A/D, AZORES

CM-PW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
3 2	12.66	25										4	21										
3 9	1.23	0																					
4 4	9.20	12										4	8										
4 8	9.25	89										23	60	6									
TOTAL	32.34	126										31	89	6									

TABLE C42b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
LAJES A/D, AZORES

CM-PW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
3 9	0.53	277							1	2	26	95	110	41	8								
4 8	0.47	158							1	1	6	43	54	46	7	1							
TOTAL	1.00	435							1	3	32	138	164	87	15	1							

TABLE C42c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
LAJES A/D, AZORES

CM-PW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3 2	0.50	365									5	31	124	151	46	6	2					
4 4	0.57	220									14	91	76	37	4							
TOTAL	1.07	585									5	45	215	225	81	10	2					

TABLE C42d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
LAJES A/D, AZORES

CM-PW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3 2	0.05	30									3	10	6	1	1	1	3	5				
4 4	0.05	30						1		3	4	6	9	5	1	1	1	1				
TOTAL	0.10	60						1		3	7	16	15	6	2	2	3	5				



TABLE C41a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
LAKEMURST NAS, NEW JERSEY

CM-PW BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	8.44	97									62	34	1									
1 3	14.59	296								16	147	116	10	4				3				
1 4	9.71	175									84	120	1									
1 5	32.52	1368								21	434	841	71	1								
TOTAL	65.08	1936								37	697	1111	83	5				3				

TABLE C41b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
LAKEMURST NAS, NEW JERSEY

CM-PW BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.52	233								1	16	76	92	30	18							
1 3	0.47	491					6	2	11	29	72	125	112	68	37	7	6	1				
1 4	0.63	764			4	4	2	1	5	26	70	227	303	82	16	8	5	11				
1 5	1.36	945							6	31	119	252	284	163	60	23	5					
TOTAL	3.00	2433			4	4	8	3	27	49	277	680	791	343	146	58	16	12				

TABLE C41c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
LAKEMURST NAS, NEW JERSEY

CM-PW BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	1.09	729					2	5	14	38	111	211	194	88	40	13	5	6	1	1		
1 4	0.41	508							6	16	58	165	177	63	15	4	4					
1 5	2.19	980					2	5	14	35	96	308	300	154	37	15	8	3	1			
TOTAL	3.71	2217					4	10	34	89	265	684	671	305	92	32	17	9	4	1		

TABLE C41d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
LAKEMURST NAS, NEW JERSEY

CM-PW BLOCK	BLOCK TIME (HRS.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.14	78					2	1	3	7	11	13	16	8	3	4	3	2	1			
1 4	0.08	52					2	2	3	4	2	12	4	1	5	5	3	2	1	2	2	
1 5	0.20	106					1	6	3	14	16	15	13	16	9	4	4	4	1			
TOTAL	0.40	236					2	9	10	8	29	29	40	33	27	19	13	10	8	3	2	2



TABLE C44a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
MARCH AFB, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 6	12.81	422									1	195	224	2									
3 6	90.60	761	1									295	462	3									
TOTAL	49.41	1123	1								1	490	686	5									

TABLE C44b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
MARCH AFB, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3 6	1.43	1070			1		1	2	1	5	82	393	448	122	12	3						
TOTAL	1.43	1070			1		1	2	1	5	82	393	448	122	12	3						

TABLE C44c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
MARCH AFB, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAK	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	3.62	2762							3	5	39	197	1148	1094	237	29	6	3	1			
TOTAL	3.62	2762							3	5	39	197	1148	1094	237	29	6	3	1			

TABLE C44d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
MARCH AFB, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	0.15	141								7	18	40	32	21	12	4	3	2	2			
TOTAL	0.15	141								7	18	40	32	21	12	4	3	2	2			



TABLE C45a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
MCCHORD AFB, WASHINGTON

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
3 6	10.45	22										0	15	1									
6 7	8.24	3										1	2										
TOTAL	26.69	25										9	15	1									

TABLE C45b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
MCCHORD AFB, WASHINGTON

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
6 7	0.42	992								3	40	112	130	40	22	1							
TOTAL	0.42	992								3	40	112	130	40	22	1							

TABLE C45c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
MCCHORD AFB, WASHINGTON

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3 6	0.75	201								1	16	54	91	33	4	2						
TOTAL	0.75	201								1	16	54	91	33	4	2						

TABLE C45d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
MCCHORD AFB, WASHINGTON

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3 6	0.05	30								3	8	3	14	3	4	2	1					
TOTAL	0.05	30								3	8	3	14	3	4	2	1					



TABLE C46a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
MCLELLAN AFB, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	2.18	409						1	1	1	44	284	68	8							
1	6	3.11	31									19	12									
2	10	7.71	90									43	55									
TOTAL	15.00	530							1	1	1	106	351	68	8							

TABLE C46b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
MCLELLAN AFB, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	0.35	170							6	52	49	54	7	2							
2	10	0.56	393				1			1	7	197	151	33	1							
TOTAL	0.91	563					1			1	15	249	200	87	7	3						

TABLE C46c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
MCLELLAN AFB, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	1.04	428								3	65	238	82	27	11	7					
1	6	1.03	679							1	2	32	219	347	73	5						
TOTAL	2.11	1107								1	2	35	284	585	155	32	11	2				

TABLE C46d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-AND-GO ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
MCLELLAN AFB, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1	4	0.33	262						1	14	42	47	36	53	37	10	2						
1	5	2.21	2004			1		5	8	33	124	280	504	244	467	247	62	22	5				
1	6	2.26	2077					2	10	22	222	297	618	263	472	216	41	14					
1	7	0.78	658							1	25	100	192	133	153	44	8	7					
TOTAL	5.58	4981			1			7	18	57	285	719	1363	676	1145	544	121	40	5				

TABLE C46e  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
MCLELLAN AFB, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	4	0.05	26					2	3	2	4	1	3	1	3	2		1	7			
1	5	0.40	303					2	6	13	21	43	62	29	58	31	12	13	5	5	5	
1	6	0.35	278					1	4	7	20	41	64	33	54	25	11	8	9		1	
1	7	0.10	62							4	11	12	14	5	15	6	3	3	7	2		
TOTAL	0.90	691						3	12	27	94	102	141	70	128	65	28	24	22	9	6	



TABLE C47a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE MISSION PHASE  
FOR DATA ACQUIRED AT  
MCCONNELL AFB, KANSAS

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	6.28	604									11	411	181	1								
1 4	4.31	803								2	24	353	372	51		1						
TOTAL	10.59	1407								2	35	764	553	52		1						

TABLE C47b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
MCCONNELL AFB, KANSAS

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.30	179					2			4	26	58	56	21	10	1	1					
1 4	0.33	188								2	4	62	102	16	2							
TOTAL	0.63	367					2			6	30	120	158	37	12	1	1					

TABLE C47c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
MCCONNELL AFB, KANSAS

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.61	495								4	13	59	154	151	71	35	7	1				
TOTAL	0.61	495								4	13	59	154	151	71	35	7	1				

TABLE C47d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-AND-GO ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
MCCONNELL AFB, KANSAS

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	1.12	834					1	1	17	38	171	266	213	138	49	8	1	1				
1 4	1.00	840			2	1	6	2	13	38	116	218	131	168	95	24	14	8	4			
1 5	0.32	219					1		2	2	19	89	81	17	6	1						
1 7	0.60	399							2	5	15	50	193	112	45	11	4	1	1			
1 8	1.82	1361							5	3	42	154	467	475	182	26	4	3				
1 9	1.50	703					5	2	8	22	84	243	226	91	20	1		1				
TOTAL	6.36	4355			2	1	13	12	48	157	524	1436	1238	641	207	42	19	11	4			

TABLE C47e  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
MCCONNELL AFB, KANSAS

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.15	108				1	1	6	4	11	13	15	21	14	9	2	3	5	2			
1 4	0.20	197			2	1	4	5	9	12	18	26	17	18	21	15	8	10	11	8	1	
1 5	0.05	32								3	10	6	3	2	2	1	1	3	1			
1 7	0.10	60				1	1	2		2	10	17	5	10	3	3	3	2	1			
1 8	0.25	182				1	3	3	9	16	20	36	40	24	12	9	2	7				
1 9	0.20	167					3	1	4	13	16	32	26	31	10	7	3	1				
TOTAL	0.95	746			2	1	7	13	21	29	63	115	123	113	102	51	30	30	29	12	4	1



TABLE C48a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
MCDOY AFB, FLORIDA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.15	106										56	107	3								
TOTAL	0.15	106										56	107	3								

TABLE C48b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
MCDOY AFB, FLORIDA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	4	150									2	53	84	10		1						
TOTAL	0.34	150									2	53	84	10		1						

TABLE C48c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
MCDOY AFB, FLORIDA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	4	234							1	3	17	84	87	29	8	2	1					
TOTAL	0.44	234							1	3	17	84	87	29	8	2	1					

TABLE C48d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
MCDOY AFB, FLORIDA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	4	36						1	4	4	7	2	5	4	5			1	2	1		
TOTAL	0.05	36						1	4	4	7	2	5	4	5			1	2	1		



TABLE C49a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
MCGUIRE AFB, NEW JERSEY

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	12.92	84									6	40	38									
1 3	6.34	297									3	132	158	1	1							
1 5	18.95	199									1	67	108									
1 6	40.97	1337									29	518	755	35								
1 7	8.57	251									2	136	111	1	1							
1 10	63.37	1284								1	60	405	751	47								
2 3	18.48	131								2	1	61	64	2	1							
2 4	18.67	76									2	25	46	3								
2 9	8.01	167									3	68	99	5								
2 10	32.07	168										75	93									
3 3	7.92	53									1	33	18	1								
3 4	7.55	45									1	17	24	1								
3 6	8.06	65								1	1	78	30	4	1							
3 10	13.96	144									1	54	86	3								
TOTAL	297.84	4301									4	131	167	2383	108	4						

TABLE C49b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
MCGUIRE AFB, NEW JERSEY

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.29	131								4	16	45	56	13								
1 5	0.23	77							1		6	31	33	6								
1 6	0.34	350						4	12	23	43	67	69	46	58	19	7	4				
1 7	0.31	177							2	1	17	74	53	23	6	1						
1 10	3.54	2550					2	4	8	29	108	324	723	755	446	140	47	9	1	1	1	
2 9	0.50	458							1	2	22	49	145	126	71	20	10	6	1			
2 10	1.96	982					1		1	4	27	139	278	328	195	45	1	1	1	1		
3 10	1.13	1009					1			6	38	116	314	313	194	57	8	1				
TOTAL	8.50	5728					4	4	14	54	223	716	1677	1683	911	326	86	74	9	2	1	

TABLE C49c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
MCGUIRE AFB, NEW JERSEY

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.92	555						1	1	21	78	235	170	37	5	7						
1 5	0.64	310				1			1	12	24	111	111	33	12	2	2	1				
1 6	4.38	3779					6	10	32	148	468	811	1001	518	212	57	14	2				
2 3	1.65	617								12	65	231	240	60	9							
2 4	1.28	631						1	1	8	57	223	233	74	10	5						
3 3	0.58	145				1	3	1	2	2	7	57	55	12		2		1	2			
3 4	0.67	354							3	8	90	189	177	70	13	4						
3 6	1.03	575						1		10	54	274	205	61	18	2						
TOTAL	11.17	6666				2	9	14	40	221	843	2091	2212	864	279	79	16	4	2			

TABLE C49d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
MCGUIRE AFB, NEW JERSEY

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.05	31					1	5	3	1	2	4	4	1	3	4	2				1	
1 5	0.05	27						1	1	2	6		5	2						1		
1 6	0.29	257					3	3	11	28	32	47	45	35	22	11	12	6		2		
2 1	0.09	61							2	5	4	14	13	11	3	4	2	1				
2 4	0.10	69						1	1	4	13	14	18	12	8	4	1	1				
3 3	0.05	21							2	2	2	6	2	3	1					1	2	
3 4	0.05	67				1	1	1	2	8	8	10	11	9	6	3	3	3	1			
3 6	0.05	28								3	4	9	3	4	4							
TOTAL	0.73	561				1	5	11	22	53	71	104	93	64	49	28	20	12	3	3		



TABLE C50a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
MINN-ST. PAUL INTL, MINNESOTA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 7	0.40	251									1	98	192									
TOTAL	0.40	251									1	98	192									

TABLE C50b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
MINN-ST. PAUL INTL, MINNESOTA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 7	0.39	187								16	61	69	36	5								
TOTAL	0.39	187								16	61	69	36	5								

TABLE C50c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
MINN-ST. PAUL INTL, MINNESOTA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 7	0.56	282						1	1	4	22	103	95	39	11	5	1					
TOTAL	0.56	282						1	1	4	22	103	95	39	11	5	1					

TABLE C50d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
MINN-ST. PAUL INTL, MINNESOTA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 7	0.05	30					1	3	2	0	2	1	4	1	4	2	2					
TOTAL	0.05	30					1	3	2	0	2	1	4	1	4	2	2					



TABLE CS1a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF PHASE  
FOR DATA ACQUIRED AT  
NEW ORLEANS NAS, LOUISIANA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	1.35	60								1	2	14	37	5	1							
1 8	8.06	75										31	42	2								
TOTAL	9.41	135								1	2	45	79	7	1							

TABLE CS1b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
NEW ORLEANS NAS, LOUISIANA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 8	0.33	230						2		9	30	60	83	34	10	2						
TOTAL	0.33	230						2		9	30	60	83	34	10	2						

TABLE CS1c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
NEW ORLEANS NAS, LOUISIANA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	1.00	344							1	5	33	130	122	34	7	3				1		
TOTAL	1.00	344							1	5	33	170	122	34	7	3				1		

TABLE CS1d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
NEW ORLEANS NAS, LOUISIANA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	0.05	23					1	1	2	5	1		4	2	2		2	3				
TOTAL	0.05	23					1	1	2	5	1		4	2	2		2	3				



TABLE C52a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
NIAGARA FALLS MUNI, NEW YORK

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	4.15	61										35	26									
1 8	3.20	2										2										
TOTAL	7.45	63										37	26									

TABLE C52b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
NIAGARA FALLS MUNI, NEW YORK

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 8	0.49	331			1	1	6	10	20	39	38	38	65	90	27	15	12	9				
TOTAL	0.49	331			1	1	6	10	20	39	38	38	65	90	27	15	12	9				

TABLE C52c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
NIAGARA FALLS MUNI, NEW YORK

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.06	515							2	17	51	91	97	119	47	3	75	32	1			
TOTAL	0.06	535							2	17	51	91	97	119	47	3	75	32	1			

TABLE C52d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
NIAGARA FALLS MUNI, NEW YORK

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.05	30							1	2	10	1	6	7		1	1	3		6		
TOTAL	0.05	30							1	2	10	1	6	7		1	1	3		6		



TABLE C53a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAXI MISSION PHASE  
FOR DATA ACQUIRED AT  
NORTH ISLAND NAS, CALIFORNIA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2 5	7.73	65										32	33									
TOTAL	7.73	65										37	33									

TABLE C53b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
NORTH ISLAND NAS, CALIFORNIA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2 5	0.46	404				1		2	6	15	43	122	120	62	30	3						
TOTAL	0.46	404				1		7	6	15	41	122	120	62	30	3						

TABLE C54a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAXI MISSION PHASE  
FOR DATA ACQUIRED AT  
PATRICK AFB, FLORIDA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 5	4.80	490									61	190	210	11									
2 5	5.03	250									6	113	131										
TOTAL	9.83	740									67	311	349	11									

TABLE C54b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
PATRICK AFB, FLORIDA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	0.35	318					2	7	24	65	73	5	94	44	18	6						
TOTAL	0.35	318					2	7	24	65	73	5	94	44	18	6						

TABLE C54c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
PATRICK AFB, FLORIDA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
2 5	1.11	315							2	13	51	99	109	29	10							1	
TOTAL	1.11	315							2	13	51	99	109	29	10			1				1	

TABLE C54d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
PATRICK AFB, FLORIDA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2 5	0.05	27								2	3	4	5	3	5	3	1					
TOTAL	0.05	27								2	3	4	5	3	5	3	1					



TABLE C56a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
PITTSBURGH-MONROEVILLE, PENNSYLVANIA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1	4	11.40								2	4	216	74	3									
2	6	10.09										89	97	1									
TOTAL	22.29	406								2	4	305	171	4									

TABLE C56b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
PITTSBURGH-MONROEVILLE, PENNSYLVANIA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 4	0.58	266								1	18	99	87	51	8								
TOTAL	0.58	266								1	18	99	87	51	8								

TABLE C56c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
PITTSBURGH-MONROEVILLE, PENNSYLVANIA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	4	0.05							1	3	3	10	4	8	8	3	3	1				
TOTAL	0.05	44							1	3	3	10	4	8	8	3	3	3				



**DISTRIBUTION OF CHINA LOAD FACTORS**  
**TABLE C-3**  
**PER THE**  
**LANDING BELLY-OUT DESIGN PHASE**  
**FOR DATA GENERATED AT**  
**FLIGHT 2-25-70**

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3 5	0.41	149										1	79	99	11							
3 6	0.70	61										0	21	30								
TOTAL	10.11	210										0	100	129	11							

**DISTRIBUTION OF CHINA LOAD FACTORS**  
**TABLE C-3A**  
**PER THE**  
**LANDING BELLY-OUT DESIGN PHASE**  
**FOR DATA GENERATED AT**  
**FLIGHT 2-25-70**

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3 5	0.56	302					1	2	14	25	10	10	107	99	11	7		1				
TOTAL	0.56	302					1	2	14	25	10	10	107	99	11	7		1				

**DISTRIBUTION OF CHINA LOAD FACTORS**  
**TABLE C-3B**  
**PER THE**  
**LANDING BELLY-OUT DESIGN PHASE**  
**FOR DATA GENERATED AT**  
**FLIGHT 2-25-70**

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3 4	1.41	776					1	2	0	11	104	200	301	74	10	2	1	3				
TOTAL	1.41	776					1	2	0	11	104	200	301	74	10	2	1	3				

**DISTRIBUTION OF CHINA LOAD FACTORS**  
**TABLE C-3C**  
**PER THE**  
**LANDING BELLY-OUT DESIGN PHASE**  
**FOR DATA GENERATED AT**  
**FLIGHT 2-25-70**

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3 6	0.09	57					1	1	1	0	10	0	11	0	0	0	1	1	2	1		
TOTAL	0.09	57					1	1	1	0	10	0	11	0	0	0	1	1	2	1		



TABLE C57a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
POINT MUGU NAS, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	8.72								1	9	167	169	11								
3	5	9.15							1	4	15	225	168	37	4							
TOTAL	15.87	1031							1	5	44	392	537	48	4							

TABLE C57b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
POINT MUGU NAS, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	247					2	2	2	7	13	70	71	19	9	4	2		3			
TOTAL	0.51	247					2	2	6	7	13	70	71	19	9	4	2		3			

TABLE C57c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
POINT MUGU NAS, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	0.67					1	7	19	15	97	101	95	70	20	6	4	2				
TOTAL	0.67	477					1	7	19	15	97	101	95	70	20	6	4	2				

TABLE C57d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
POINT MUGU NAS, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	0.05								1	2	10	11	8	5	2	2					
TOTAL	0.05	41								1	2	10	11	8	5	2	2					



TABLE C38a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAXI MISSION PHASE  
FOR DATA ACQUIRED AT  
RANDOLPH AFB, TEXAS

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (S)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 6	21.95	981									10	476	472	23									
1 7	9.17	1139								1	32	500	516	80	3								
TOTAL	31.12	2120								1	42	984	988	103	2								

TABLE C38b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
RANDOLPH AFB, TEXAS

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (S)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 6	1.17	524							1	2	8	170	292	46	7								
1 7	0.30	191								2	9	64	95	19	2								
TOTAL	1.47	725							1	4	17	242	387	65	9								

TABLE C38c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
RANDOLPH AFB, TEXAS

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (S)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 6	1.21	1103								14	114	440	422	106	7								
1 7	0.62	533							1	1	62	191	220	49	6			2	1				
TOTAL	1.83	1636							1	15	176	631	642	155	13			2	1				

TABLE C38d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
RANDOLPH AFB, TEXAS

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAK%	LOAD FACTOR DISTRIBUTION (S)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	0.15	127						1		8	19	33	27	25	4	5	1	2				
1 7	0.08	38							1	4	6	8	11	6	7							
TOTAL	0.20	165						1	1	12	25	41	38	31	11	5	1	2				



TABLE C59a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
RHEIN MAIN A/D, GERMANY

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 3	0.65	329									6	99	214	10									
1 4	27.49	865									16	359	448	20					2				
1 7	3.07	489								1	3	135	296	44									
2 5	13.08	159										51	108										
2 10	28.47	314									2	87	216	4									
3 4	4.11	39										5	16										
4 10	23.34	118										65	53										
TOTAL	108.41	2313								1	47	801	1169	98					2				

TABLE C59b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
RHEIN MAIN A/D, GERMANY

(M-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2 10	2.57	1814					1	4	11	51	201	615	502	105	92	22	9	2				
3 10	1.41	1014						1	13	44	154	377	268	165	28	4						
TOTAL	3.98	2828					1	5	24	95	355	993	770	470	120	26	9	2				

TABLE C59c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
RHEIN MAIN A/D, GERMANY

LM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.87	629		3	2	1	1	1	10	30	94	151	107	137	62	14	5	4	3	4		
1 4	5.53	2802			1		7	8	32	95	115	934	900	340	146	46	14	4				
1 9	1.22	1062						2	14	46	126	280	263	215	92	20	4					
2 5	2.58	857									30	371	157	71	15	1	3					
3 4	1.20	597							1	1	19	199	287	81	6	3						
TOTAL	11.40	6047		3	3	1	8	11	57	172	613	1435	1914	894	321	84	26	8	3	4		

TABLE C59d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
RHEIN MAIN A/D, GERMANY

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.05	34						1	2	2	4	6	4	2	4		1	4				
1 4	0.25	161				2	3	2	7	17	28	16	25	18	12	11	8	7	4	1		
1 9	0.05	50				1	1		4	8	5	6	4	6	2	5	3	4	1			
2 5	0.09	43								1	6	11	14	6	3							
3 4	0.05	34										11	16	7								
TOTAL	0.49	322				3	4	3	13	30	43	50	63	39	21	20	12	15	5	1		



TABLE C60a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
RICHARDS-GERARD AFB, MISSOURI

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	9.07	147										73	73	1								
TOTAL	9.07	147										73	73	1								

TABLE C60b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
RICHARDS-GERARD AFB, MISSOURI

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.28	119							2	1		23	34	31	5	1						
TOTAL	0.28	119							2	1		23	34	31	5	1						

TABLE C60c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
RICHARDS-GERARD AFB, MISSOURI

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.77	248								1	11	106	114	15		1						
TOTAL	0.77	248								1	11	106	114	15		1						

TABLE C60d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-AND-GO ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
RICHARDS-GERARD AFB, MISSOURI

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 8	0.24	182								4	17	51	73	22	8	3	1	1				
TOTAL	0.24	182								4	17	51	73	22	8	3	1	1				

TABLE C60e  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
RICHARDS-GERARD AFB, MISSOURI

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.05	22					1	1			3	4	6	3	1	1				2		
1 8	0.05	40								1	9	6	6	5	6	6			1			
TOTAL	0.10	62					1	1		1	12	10	12	8	7	7		1		2		



TABLE C61a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE MISSION PHASE  
FOR DATA ACQUIRED AT  
ROBINS AFB, GEORGIA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	8.10									1	8	27	2	1							
1	6	9.87									3	57	75	4								
2	5	6.16										55	94									
TOTAL	24.13	307									4	100	196	6	1							

TABLE C61b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
ROBINS AFB, GEORGIA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	4	0.33									13	59	64	75								
2	5	0.41								1	16	101	112	35	1							
TOTAL	0.74	427								1	29	160	176	60	1							

TABLE C61c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
ROBINS AFB, GEORGIA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	0.76						1	1	1	9	57	107	66	7	6	1	2				
1	6	0.52						1	1	6	35	136	90	75	25	5		2				
TOTAL	1.28	633						1	2	7	44	193	197	141	32	11	1	4				

TABLE C61d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
ROBINS AFB, GEORGIA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	0.03	33						4	3	8	5	7	6	1	1	1	1				1
1	6	0.05	40						2		9	4	7	7	2	5	3		1			
TOTAL	0.10	73							2	4	12	12	12	9	8	6	4	1	2			1



TABLE C62a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
SAIGON, TAN SON NHUT AFB, VIETNAM

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 4	8.00	53										20	33										
1 5	22.44	926								1	24	420	450	13									
1 6	15.66	222									1	69	146	6									
1 7	14.65	534							2	1	14	252	250	30	3	1	1						
1 8	21.83	170									2	110	65	1									
1 9	23.33	296									11	232	145	10									
1 10	24.20	194									1	89	104										
2 3	10.43	9										2	3										
2 4	13.10	257									2	69	165	1					1	1			
2 5	17.32	20										12	16										
2 6	6.66	121										16	102	3									
2 8	6.33	160									1	91	114	2									
2 9	0.70	0																					
2 10	7.00	76										32	44										
3 3	17.54	30									3	22	5										
3 4	22.21	71										27	43										
3 5	4.82	1											1										
3 6	17.81	247									1	104	140	2									
3 7	5.13	42									2	19	21										
3 10	6.30	4											4										
4 5	8.38	7										4	3										
5 3	1.48	4										1	3										
5 4	15.72	31								1	3	10	14	2	1								
5 5	15.84	50								2	2	22	29	2	1								
5 6	2.34	25										5	20										
TOTAL	311.24	3582							2	5	49	1496	1920	72	5	1	2	1	1				

TABLE C62b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
SAIGON, TAN SON NHUT AFB, VIETNAM

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 4	0.79	456					1	1	1	4	31	140	194	48	8								
1 5	1.21	981						1	1	13	129	329	364	114	26	3	1						
1 6	0.45	213									12	60	94	41	6								
1 8	1.00	647					1		4	26	126	190	217	90	21	3	1						
1 9	2.55	702						1		7	75	206	278	120	15								
1 10	1.77	1304							9	75	227	320	476	214	63	11	1						
2 4	0.99	262							2	13	57	84	60	33	2	1							
2 8	0.56	314								1	12	103	110	75	4	1							
2 10	0.47	352							1	9	49	191	89	61	12								
3 10	0.67	501							1	14	82	137	156	89	17	4	1						
TOTAL	9.86	5812					2	3	19	162	800	1886	2854	985	154	23	4						

TABLE C62c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
SAIGON, TAN SON NHUT AFB, VIETNAM

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 7	1.13	864						2	6	27	103	263	300	124	21	9	1						
2 4	1.54	989							11	28	116	323	327	140	35	8	1						
2 5	1.89	505						2	6	8	50	196	159	50	12	6	2		4		2		
2 6	0.51	544						1	2	34	91	113	150	96	41	6	4						
3 3	0.94	500								4	35	151	225	65	4	4							
3 4	2.26	1490							10	93	169	361	521	172	21	2	1						
3 5	0.55	286							3	18	60	70	84	29	2								
3 6	1.20	826						2	9	20	115	300	230	113	23	6							
3 7	0.66	471						1	5	12	85	117	146	80	19	6							
4 5	0.89	666						3	11	30	146	195	167	125	20	6	3						
5 3	0.96	262								13	49	64	117	17	2								
5 4	0.80	529								3	40	223	229	33	1								
5 5	2.74	1753					1	2	7	13	146	632	722	200	21	5	2		2				
5 6	1.12	740						3	5	18	72	235	334	51	16	3	2		1				
TOTAL	17.29	10433					1	16	75	283	1325	3391	5719	1297	238	61	16	7	4				

TABLE C62d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-AND-GO ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
SAIGON, TAN SON NHUT AFB, VIETNAM

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
5 4	0.51	308									12	78	170	43	3	2						
TOTAL	0.51	308									12	78	170	43	3	2						



TABLE C62a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
SAIGON, TAN SON NHUT AFB, VIETNAM

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 7	0.05	43						1	1	3	8	9	10	6	3	1	1					
2 4	0.10	87				1		1	3	11	13	16	14	9	9	2	2	1				
2 9	0.10	58						1	1	12	13	11	6	1	2	9		2				
2 6	0.05	62				1		3	4	5	5	13	7	5	12	3	1		1			
3 3	0.10	86							4	4	9	19	29	10	3	5	3					
3 4	0.15	132					1	1	7	19	19	22	9	21	14	8	6	7	1	1		
3 5	0.05	38							1	6	10	6	4	9	2		1	1				
3 6	0.05	26								2	4	4	3	6	3	1	1	1				
3 7	0.05	49						5	7	4	7	7	1	3	3	7	4	1				
4 5	0.05	48					1	1	4	6	8	6	9	7	2	1	1	2				
5 3	0.05	34							1	8	11	5	2	9	2	2						
5 4	0.11	108						3		9	16	29	17	17	6	2	3	3	2	2		
5 5	0.15	99		1			1	1	1	4	9	25	10	7	12	6	5	6	3	1		
5 6	0.05	46					1	1	2	6	8	8	5	7	3	2	2		1			
TOTAL	1.11	913		1	2	4	17	37	88	140	180	194	117	76	54	30	25	9	4			

TABLE C63a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE MISSION PHASE  
FOR DATA ACQUIRED AT  
SCOTT AFB, ILLINOIS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	3.03	84									39	40	6									
1 3	1.25	4									1	3										
1 4	19.62	919									26	483	480	6								
1 5	27.22	2078									13	1110	1694	99	2							
1 6	26.49	1296									27	866	662	40	1							
1 7	10.68	354										147	200	7								
TOTAL	119.09	5531									64	2287	3697	118	3							

TABLE C63b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
SCOTT AFB, ILLINOIS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.20	154							1	3	23	62	33	13		1						
1 4	0.63	324					1		4	5	19	114	131	46	12	1						
1 5	3.24	1376							3	28	100	440	309	160	34	8	1					
1 6	0.74	351				1		4	2	1	20	127	129	53	13	1						
1 7	0.63	217									9	67	87	49	5							
TOTAL	5.52	2422				1	1	4	10	34	160	810	909	329	64	11	1					

TABLE C63c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
SCOTT AFB, ILLINOIS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.27	112							1		10	40	39	14	2	1						
1 4	1.15	568								9	39	267	197	78	12	1						
1 5	3.33	2397						1	10	47	261	813	828	344	72	12	2	2				
1 6	1.45	1071						2	4	29	137	399	345	122	28	4	1					
TOTAL	6.40	4143						3	20	85	447	1404	1409	550	114	18	3	2				

TABLE C63d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
SCOTT AFB, ILLINOIS

CU-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 2	0.05	27						1		1	3	7	3	5	1	4							
1 4	0.15	85								5	16	21	18	13	9	3							
1 5	0.40	274			1	2	3	4	9	12	23	24	51	32	29	22	7	8	14	5	6	1	1
1 6	0.15	112						1	3	3	11	20	19	20	17	8	2	5	2	1			
TOTAL	0.75	498			1	2	3	5	9	15	40	67	100	93	64	40	14	13	16	6	6	1	1



TABLE C64a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE MISSION PHASE  
FOR DATA ACQUIRED AT  
SHEPPARD AFB, TEXAS

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	12.57	1500									35	525	776	161	3							
1 4	23.24	1435								6	71	592	641	110	6	1						
1 5	46.94	5947								6	220	2210	3185	313	13							
TOTAL	82.79	8882								12	326	3327	4602	592	22	1						

TABLE C64b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
SHEPPARD AFB, TEXAS

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAK	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.30	280								1	11	113	100	48	5	1	1					
1 4	0.62	409									23	127	170	82	7							
1 5	7.08	1351								4	55	465	642	173	10	2						
TOTAL	8.00	2040								5	89	705	912	303	22	3	1					

TABLE C64c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
SHEPPARD AFB, TEXAS

FW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	2.51	2097					1	1	7	12	171	613	966	293	22	9	1	1				
1 4	1.13	719							1	3	64	214	265	149	21							
1 5	4.28	3744					1	6	19	86	493	1197	1201	557	142	36	5	1				
TOTAL	7.92	6560					2	7	27	103	728	2024	2432	999	185	45	6	2				

TABLE C64d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-AND-GO ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
SHEPPARD AFB, TEXAS

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	3.98	3222			1		6	11	65	246	577	797	494	589	327	114	31	13				
1 4	2.05	2412					1	4	34	123	314	571	534	477	215	92	33	13		1		
1 5	0.49	607						6	17	33	74	123	140	136	60	12	1	3				
1 7	0.89	462						2	3	19	70	108	78	133	40	6	1	2				
1 8	1.21	744							2	4	18	113	178	210	169	37	12	1				
1 9	1.11	789							1	3	34	100	177	185	188	51	14	4	2			
TOTAL	10.53	8206			1		9	26	126	473	1198	1954	1642	1692	730	250	71	33	1			

TABLE C64e  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
SHEPPARD AFB, TEXAS

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.65	610					2	11	19	43	86	135	80	93	77	28	13	13	1	1		
1 4	0.50	394					2	4	24	26	66	78	68	60	37	22	12	7	3	2		
1 5	0.40	374					1	3	6	9	28	51	73	71	45	33	17	18	13	4	2	
1 7	0.10	44						3	1	5	2	8	2	5	5	3		2		3		
1 8	0.15	97							2	6	10	17	24	20	8	1	1					
1 9	0.15	94							1	1	14	25	21	23	6	1	1	1				
TOTAL	1.95	1613					3	1	10	22	60	106	223	330	277	246	166	72	45	36	8	3



TABLE C65a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAXI MISSION PHASE  
FOR DATA ACQUIRED AT  
TAINAN A/D, TAIWAN, FORMOSA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2	6	5.58									2	97	139	7								
3	5	5.29									19	108	163	11								
TOTAL	10.87	946									21	205	302	18								

TABLE C65b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
TAINAN A/D, TAIWAN, FORMOSA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	5	0.43			1		3	10	23	70	82	37	56	69	34	18	3	8				
TOTAL	0.43	374			1		3	10	23	70	82	37	56	69	34	18	3	8				

TABLE C65c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
TAINAN A/D, TAIWAN, FORMOSA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2	6	0.90	965			1	8	43	27	45	95	160	121	247	127	39	27	12	5			
TOTAL	0.90	965			1	8	43	27	45	95	160	121	247	127	39	27	12	5				

TABLE C65d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
TAINAN A/D, TAIWAN, FORMOSA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
7	6	0.05				3	9	6	2	5	1	2	6	6	3	1	5	1				
TOTAL	0.05	50				3	9	6	2	5	1	2	6	6	3	1	5	1				



TABLE C66a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAXI MISSION PHASE  
FOR DATA ACQUIRED AT  
TAKHLI A/D, THAILAND

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 8	5.01	190									10	112	68									
5 4	5.45	36				1	1	2	1			3	21	3	1	1	1	1				
TOTAL	10.46	226				1	1	2	1		10	115	89	3	1	1	1	1				

TABLE C66b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
TAKHLI A/D, THAILAND

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 8	0.45	514				1	3		10	37	81	131	154	68	22	4	1	2				
TOTAL	0.45	514				1	3		10	37	81	131	154	68	22	4	1	2				

TABLE C66c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
TAKHLI A/D, THAILAND

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
5 4	1.01	924					1	2	5	21	92	316	234	117	25	6	3	2				
TOTAL	1.01	924					1	2	5	21	92	316	234	117	25	6	3	2				

TABLE C66d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
TAKHLI A/D, THAILAND

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
5 4	0.03	46						2		1	13	11	8	8	2					1		
TOTAL	0.03	46						2		1	13	11	8	8	2					1		



TABLE C67a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
TINKER AFB, OKLAHOMA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 1	33.73	1975					1	1	9	24	122	631	987	140	66	9	3	2				
1 2	158.91	5676							4	13	105	2994	2928	175	26	7						
1 3	232.00	9290						1	2	14	252	3814	4926	263	23	2	1					
1 4	90.12	6529					1	2	8	42	977	2000	2006	978	149	16	2					
1 5	130.91	4578							2	17	197	1717	2505	161	17	1						
1 6	444.01	14993							8	59	917	6702	7144	444	67	2						
1 7	404.13	15744						2	11	75	600	6713	7750	532	93	7	1					
1 8	33.71	1860								4	54	755	970	70	4	1						
1 9	0.30	0																				
1 10	522.39	17390					3	5	31	114	744	6926	8633	782	111	30	7	2				
3 10	24.93	358									3	164	189									
TOTAL	2075.22	78596					5	11	75	342	2995	31014	38898	3545	496	75	14	4				

TABLE C67b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
TINKER AFB, OKLAHOMA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.99	328							2	10	20	106	141	40	6	2	1					
1 3	1.46	743						1	2	3	29	241	392	101	11	3						
1 4	2.25	1234							1	10	68	457	574	113	9	2						
1 5	5.62	3029							3	32	185	1041	1340	359	63	6						
1 6	17.50	9402				1	2	4	35	148	734	3130	3915	1200	183	34	14	2				
1 7	6.01	3466					1		6	60	287	1182	1372	469	73	11	4	1				
1 8	1.91	890								4	71	341	355	100	11							
1 10	30.30	19240		1	1	1	10	13	63	361	2045	6127	7329	2689	496	78	19	6		1		
3 10	1.22	808					1			22	53	75	120	26	7	1						
TOTAL	67.05	30637		1	1	2	14	18	112	650	3442	12700	15400	5105	859	137	38	9		1		

TABLE C67c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
TINKER AFB, OKLAHOMA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 1	1.90	904					1	5	8	14	53	345	324	104	30	14	3	1				
1 2	11.21	5181					1	7	21	104	901	1856	1024	524	125	27	7	2				
1 3	18.31	8879				1		4	26	149	853	3343	3506	895	174	37	9	2				
1 4	10.77	4397						2	19	94	339	1420	1590	587	111	20	4	1	2			
1 5	0.18	3772						4	14	78	399	1236	1505	423	115	26	9	2	1			
1 6	7.97	4252					3	5	16	104	421	1528	1580	449	104	26	12				1	
1 7	23.55	13532					3	15	48	421	1895	6134	4946	1742	383	107	43	16	2		1	
1 8	0.94	867						2	12	68	125	171	202	167	72	32	8	4				
TOTAL	82.85	41785				1	8	44	186	1083	4587	24041	15461	4691	1114	289	95	28	5		2	



TABLE C67d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-AND-GO ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
TINKER AFB, OKLAHOMA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 1	0.45	221						1	1	13	34	69	37	46	15	4	1					
1 2	2.37	1493					2	4	28	115	251	433	415	294	110	31	17					
1 3	4.57	2790					1	8	35	120	412	802	851	364	148	38	6	4	1			
1 4	6.86	4166			4	6	10	11	46	142	466	1239	1196	713	236	62	16	14	3	1	1	
1 5	3.56	2214					1	10	17	90	293	621	672	380	104	19	3	2	2			
1 6	0.75	507					1	3	16	33	73	87	146	106	26	13	3					
1 7	8.25	6101					6	27	119	296	896	1408	1952	1014	294	72	9	8				
1 8	5.48	5154			2	2	10	31	65	193	718	1282	1613	891	268	59	12	7	1			
1 9	5.52	4915			1	4	5	11	52	193	553	1291	1599	837	277	76	11	4	1			
1 10	0.19	160					1		1	7	24	42	56	26	1	1	1					
TOTAL	37.92	27921			7	13	36	106	380	1202	3720	7274	8537	4671	1479	375	72	39	8	1	1	

TABLE C67e  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
TINKER AFB, OKLAHOMA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 1	0.20	109							6	5	13	34	16	13	6	3	6	5	1	1		
1 2	1.45	979			1	1	12	12	48	80	131	217	154	125	84	58	29	18	1	6	2	
1 3	2.38	1402				5	6	19	31	103	216	334	307	185	93	39	30	23	4	5	2	
1 4	1.51	894			2	2	14	12	29	57	142	186	164	105	81	37	29	17	8	4	3	
1 5	1.09	618				1	2	4	10	27	55	86	121	118	89	52	16	8	6	7	5	3
1 6	0.60	625				2	2	2	13	27	47	98	122	128	88	47	28	11	8	1	1	
1 7	3.13	2245			3	11	33	49	78	197	361	387	418	312	175	72	69	53	14	11	2	
1 8	0.98	856					1	4	14	31	58	113	174	205	136	61	24	16	11	4	1	1
1 9	0.55	881						2	11	17	45	131	194	190	163	83	27	11	6	1		
1 10	0.05	56						2	2	5	17	8	3	5	5	2	4	2	1			
TOTAL	12.46	8657			2	9	24	77	142	296	652	1308	1777	1703	1221	687	304	213	149	42	14	13



TABLE C68a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
TRAVIS AFB, CALIFORNIA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
1 2	16.90	371									3	13	160	162	12	10		3					
1 3	94.40	3382							1	14	98	1460	1625	173	11								
1 4	98.49	1772								1	98	78	857	40	1								
1 5	28.22	1532								6	53	570	600	90	5								
1 6	82.65	3793								3	162	1608	1912	107	1								
1 7	90.36	999									3	297	681	18									
1 8	95.10	2286									13	1184	1067	21	1								
2 3	35.30	1172								4	76	390	722	70		1							
2 4	11.43	149									4	54	99	2									
2 5	5.09	432									4	211	211	6									
2 7	2.77	16										2	14										
2 8	3.92	16										7	9										
2 10	11.21	16										4	12										
3 4	3.51	4										1	3										
3 10	33.59	146									4	52	84	6									
4 3	17.75	423									28	203	190	2									
4 4	8.37	166									2	95	67	2									
4 6	13.05	85									1	35	46	3									
4 8	11.00	89										54	35										
4 10	10.95	4										1	3										
5 4	4.80	320									16	207	97										
5 8	19.35	119										55	63	1									
7 3	8.03	107									18	38	46	5									
7 4	2.99	24										9	14	1									
7 8	10.73	111								1	9	38	59	4									
7 9	1.80	0																					
TOTAL	598.76	17534							1	32	544	7535	8876	513	29	4							

TABLE C68b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
TRAVIS AFB, CALIFORNIA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	1.62	933					1	7	12	48	142	218	285	116	71	27	11					
1 6	9.28	3196			2		3	15	25	112	377	1031	1157	909	121	32	8	4				
1 7	2.01	1252						1	5	12	127	408	484	184	44	6	1					
1 8	4.91	2238					1	3	16	68	215	919	707	238	51	15	5					
2 7	0.43	312					2	1	3	5	42	70	124	43	16	4	1	1				
2 8	0.41	164									8	90	62	4								
2 10	1.75	1029							3	19	133	336	394	130	12	2						
3 10	7.46	3437					1	2	7	77	464	1181	1106	516	73	8	1					
4 8	0.53	242							1	6	36	74	70	48	6		1					
4 10	0.61	340							1	1	11	72	123	27	3						1	
5 8	2.33	1813							4	9	48	216	537	696	242	52	6	2	1			
7 8	1.03	784							1	2	14	128	238	284	104	19	1	1				
TOTAL	28.37	15840			2		8	35	85	410	1901	5174	5462	2161	468	96	31	7				

TABLE C68c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
TRAVIS AFB, CALIFORNIA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	3.93	497								6	47	173	211	52	7	1						
1 3	7.76	3918				1	3	7	41	135	467	1841	1350	490	134	36	11	1	1			
1 4	11.29	5514			1				30	151	667	1862	1826	694	212	49	5	6				
1 5	7.68	4336							5	14	127	333	1272	1449	694	208	25	8	1			
1 6	7.74	4767						2	20	133	517	1923	1809	502	124	37	7	1				
2 3	8.59	1313				1	2	4	9	17	77	342	713	98	29	14	3	3	1			
2 4	3.17	741									5	65	382	318	44	13	7					
2 5	0.64	315							2		5	30	92	150	31	7						
3 4	1.11	290										28	186	120	24	1						
3 10	0.91	322									3	25	156	61	82	11	2					
4 3	1.98	966							6	16	181	175	224	37	5	1	1					
4 4	1.06	162								3	18	66	99	16	7	1						
4 6	1.77	645								5	39	164	188	45	3		1					
5 4	0.76	883						2	8	48	198	225	216	119	22	8	4					
7 3	0.48	355					1		9	16	67	70	110	66	14	2						
7 4	1.85	327								2	44	107	152	19	3							
TOTAL	59.62	24721			1	2	11	28	199	687	2895	8256	8656	3013	880	174	45	12	2			



TABLE C484  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-AND-GO ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
TRAVIS AFB, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	1.37	895			2	1	7	7	29	64	150	160	206	147	71	32	15	4				
1 4	2.48	1506					4	13	29	99	212	302	368	288	112	46	19	13	1			
1 5	3.69	2080					6	17	32	107	313	610	594	270	93	23	11	3	1			
1 6	1.33	749					5	8	20	41	131	152	201	115	44	13	10	6	1			
TOTAL	9.87	5230			2	1	22	45	110	311	806	1224	1371	820	370	114	55	26	7			

TABLE C485  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
TRAVIS AFB, CALIFORNIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 2	0.10	49					7	4	21	48	76	73	61	61	16	23	16	14	7	1		
1 3	0.60	430					17	16	21	52	69	75	83	70	45	40	21	17	13	6	1	
1 4	0.79	552			1	5	7	10	28	51	86	67	62	40	48	35	16	14	5	2		
1 5	0.75	513			1	5	7	10	28	51	86	67	62	40	48	35	16	14	5	2		
1 6	0.50	375					6	6	17	38	61	57	70	38	30	16	11	8	12	5		
2 3	0.35	213			2		4	3	11	7	16	42	19	29	13	10	7	6	3	1		
2 4	0.10	71				1	2	2	2	10	11	9	12	9	4	5	3	1				
2 5	0.05	26							1	3	2	7	7	7	1	1		1				
3 4	0.05	38								2	6	12	9	7	2	3		1				
3 10	0.05	20									2	11	1	1	2	1		2				
4 3	0.10	72							1	1	6	22	31	9	1		1					
4 4	0.05	44					1	1	1	2	3	5	5	9	4	2	2	1				
4 6	0.05	50					1		1	5	13	5	4	2	10	4	4	1	1			
5 4	0.05	47						5	1	8	4	6	4	2	5	5	1	1	2			
7 3	0.05	34			1	2	1	2	4	4	5	6	3	1	2	2	2		1			
7 4	0.05	40							4	3	7	7	1	5	7	4						
TOTAL	3.65	2604			5	13	50	54	120	233	399	405	407	341	210	153	86	65	47	15	1	



TABLE C69a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAXI MISSION PHASE  
FOR DATA ACQUIRED AT  
TULSA INTL, OKLAHOMA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	15.84	1053								2	41	342	597	68	2	1						
TOTAL	15.84	1053								2	41	342	597	68	2	1						

TABLE C69b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
TULSA INTL, OKLAHOMA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	4	0.66							10	34	82	117	160	117	47	20	4					
TOTAL	0.66	588							10	34	82	117	160	117	47	20	4					

TABLE C69c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
TULSA INTL, OKLAHOMA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	4	1.20					1	1	3	43	136	372	363	196	37	9	1					
TOTAL	1.20	1162					1	1	3	43	136	372	363	196	37	9	1					

TABLE C69d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-AND-GO ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
TULSA INTL, OKLAHOMA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	3	1.83				5	17	24	57	117	214	378	395	309	129	120	66	43				
1	4	1.58					1	6	40	88	229	437	393	327	120	51	11	1			3	
1	5	2.33						1	16	75	234	545	481	160	46	7	1	1				
1	7	0.29					2	6	13	27	36	43	43	41	25	12	1					
1	8	1.17					1	6	12	57	162	266	333	122	59	7	2	2				
1	9	1.27					1	1	5	21	86	392	418	102	11	3	2	2				
TOTAL	2.47	7480				9	22	46	143	385	961	2861	2863	1061	386	208	83	53	3			

TABLE C69e  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
TULSA INTL, OKLAHOMA

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	3	0.35				3	1	4	11	18	54	71	64	41	30	17	7	4	1			
1	4	0.40					1	10	13	28	43	71	58	63	39	11	6	4	2			
1	5	0.25					3	3	3	10	28	49	54	23	7	3	1	1	1			
1	7	0.09							2	8	15	12	9	5	3	1	1					
1	8	0.20					1	2	5	14	24	34	42	24	10	4	2	2	1	1		
1	9	0.20					1	2	4	2	19	33	34	20	9	3	2	1				
TOTAL	1.45	1222				3	7	21	34	76	176	273	268	182	100	62	19	13	5	1		



TABLE C70a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAXI MISSION PHASE  
FOR DATA ACQUIRED AT  
UBON A/D, THAILAND

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2	7	98									2	76	19	1								
3	2	1227							1	25	163	465	482	79	11	1						
TOTAL	11.11	1925							1	25	165	541	501	80	11	1						

TABLE C70b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
UBON A/D, THAILAND

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2	7	579				1	13	23	46	53	79	64	102	66	66	42	18	4	1	1		
TOTAL	0.53	579				1	13	23	46	53	79	64	102	66	66	42	18	4	1	1		

TABLE C70c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
UBON A/D, THAILAND

CW-FW BLOCK	BLOCK TYPE (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3	2	623					8	8	28	53	134	74	197	75	22	14	5	4	1			
TOTAL	0.73	623					8	8	28	53	134	74	197	75	22	14	5	4	1			

TABLE C70d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
UBON A/D, THAILAND

CW-FW BLOCK	BLOCK TYPE (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3	2	46			1	1	5	5	7	4	5	1	3	3	2	2	1	3	3			
TOTAL	0.65	46			1	1	5	5	7	4	5	1	3	3	2	2	1	3	3			



TABLE C71a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAXI MISSION PHASE  
FOR DATA ACQUIRED AT  
WAKE AIRPORT, WAKE ISLAND

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2 2	5.03	5										2	3									
2 3	11.81	188										84	98	6								
2 9	7.24	356										119	141	24	2	1						
2 10	27.32	2630						1	5	39	333	917	1042	253	31	7	2					
3 2	4.38	0																				
3 3	29.29	126									8	51	62	5								
3 8	11.65	61									29	31	1									
3 9	7.05	701							5	5	72	253	280	66	18		2					
3 10	45.57	2212							2	17	155	911	932	182	11	2						
4 2	1.41	0																				
4 3	2.38	6																				
4 7	4.78	5																				
4 8	4.40	1103								31	133	315	419	167	28	4						
4 10	6.78	514							1		61	258	189	22	2	1						
5 3	6.99	60									26	23	3									
5 9	10.30	177									64	102	5									
5 10	5.70	1078						5	3	31	26	148	332	324	127	57	17	10	3			
7 4	9.60	34										4	29	1								
7 9	14.56	293										118	175									
TOTAL	215.83	9544						27	4	50	126	960	3484	3860	457	149	32	14	3			

TABLE C71b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RIM MISSION PHASE  
FOR DATA ACQUIRED AT  
WAKE AIRPORT, WAKE ISLAND

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2 9	0.34	530						9	6	17	45	83	117	134	82	27	12			2		
2 10	2.02	1974				3	5	40	50	110	131	287	351	403	281	144	94	18	26	7	1	1
3 8	0.55	475						1		3	16	29	157	185	56	20	7	1				
3 9	0.59	600						3	7	8	15	35	97	125	129	75	32	13	7		2	7
3 10	4.80	3060				1	6	19	28	95	174	481	620	695	535	263	105	36	20	2		
4 8	0.59	695						3	1	4	11	43	78	92	138	67	36	9	4	1	2	1
4 10	0.54	418								3	10	21	57	94	112	64	36	16	4	2	1	
5 9	0.61	474				1	1	4	9	23	55	81	59	93	74	46	17	8	2	1		
5 10	0.55	549				1	3	12	11	34	59	100	58	99	92	48	22	4	5	1		
7 4	1.18	1105						4	9	14	28	100	167	209	208	197	98	41	20	10	1	
TOTAL	11.17	9695				6	24	96	133	346	674	1440	1882	2196	1543	772	246	135	73	19	9	1

TABLE C71c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
WAKE AIRPORT, WAKE ISLAND

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.9	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0	
2 2	1.17	270				1				8	5	15	85	113	31	12	7	5	3	3	1		
2 3	3.63	1875				1	4		18	28	51	167	559	641	237	42	49	18	24	9	1		
3 1	1.67	167							1	6	23	69	56	10	7	1							
3 3	5.57	2770							2	12	23	49	116	354	787	929	321	89	40	16	21	7	5
4 3	1.10	226									7	11	56	94	37	8	9	1	1				
4 7	0.99	257								2	7	36	66	92	35	12	1	7	1				
5 2	1.94	727							4	9	14	15	65	224	253	92	28	12	9	2			
7 4	1.90	1038								2	7	21	106	318	218	249	76	30	9				
TOTAL	17.26	7350				1	5	9	30	53	108	228	779	2160	2396	1612	289	139	65	52	15	9	

TABLE C71d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
WAKE AIRPORT, WAKE ISLAND

CW-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
2 2	0.05	54			1	1	2	2	1	7	6	6	4	6	3	3	2	3				
2 3	0.15	148			1	2	2	6	9	10	20	35	18	12	19	10	6	12	2		1	
3 2	0.25	47					1	3	1	2	9	6	8	4	7	2						
3 3	0.30	309			1	2	6	8	7	20	18	52	45	42	30	17	15	20	17	4	2	1
4 1	0.65	52						2	2	2	8	10	4	2	4	8	4	2	3	1		
4 7	0.05	31				1	3	4	2	3	3	1	2	1	3	1	1	1	1	1		
5 1	0.10	104						8	5	6	14	6	13	6	11	9	10	6	7	2		
7 4	0.10	122				2	2	1	5	6	7	18	21	5	15	7	10	13	8	4		
TOTAL	0.85	882			2	9	13	34	30	49	72	121	125	85	83	76	55	51	21	4	1	



TABLE C72a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
WHEELUS AB, LIBYA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3 8	1.00	3										2	1									
4 3	7.53	1											1									
TOTAL	9.33	4										2	2									

TABLE C72b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
WHEELUS AB, LIBYA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3 8	0.49	330							5	2	31	137	124	35	3		1					
TOTAL	0.49	330							5	2	31	137	124	35	3		1					

TABLE C72c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-MIT MISSION PHASE  
FOR DATA ACQUIRED AT  
WHEELUS AB, LIBYA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
4 3	0.45	337							6	15	99	64	126	49	13	5	1					
TOTAL	0.45	337							6	15	99	64	126	49	13	5	1					

TABLE C72d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
WHEELUS AB, LIBYA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
4 3	0.05	35							3	1	8	8	9	6	3	1						
TOTAL	0.05	35							3	1	8	8	9	6	3	1						

TABLE C73a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TOUCH-AND-GO ROLL MISSION PHASE  
FOR DATA ACQUIRED AT  
WHITMAN AFB, MISSOURI

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.28	196						3	2	10	33	52	38	36	13	8	1					
1 4	1.04	731					1	10	24	49	122	156	183	100	45	27	7					
1 5	0.66	351					1	4	5	26	53	80	82	49	39	9	4					
TOTAL	1.98	1278					2	17	31	85	207	288	302	193	97	44	12					

TABLE C73b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
WHITMAN AFB, MISSOURI

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.09	31						1			10	10	6	2				1				
1 4	0.20	153					1	1	5	10	26	31	36	21	13	8		1		1	1	
1 5	0.10	42			1	1			1	6	2	9	9	6	3	2	1		1		1	1
TOTAL	0.39	226			1	1	1	2	6	16	38	50	49	29	16	11	1	2	1	1	1	



TABLE C74a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAXI MISSION PHASE  
FOR DATA ACQUIRED AT  
WILKES-BARRE-SCRANTON, PENNSYLVANIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	4.69	0																				
3 6	4.33	0																				
TOTAL	9.02	0																				

TABLE C74b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
WILKES-BARRE-SCRANTON, PENNSYLVANIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
3 6	0.41	8											4	4								
TOTAL	0.41	8											4	4								

TABLE C74c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
WILKES-BARRE-SCRANTON, PENNSYLVANIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	0.87	85								1	4	37	39	3	1							
TOTAL	0.87	85								1	4	37	39	3	1							

TABLE C74d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
WILKES-BARRE-SCRANTON, PENNSYLVANIA

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	0.05	16							1		1	1	5		2	2	1	2	1			
TOTAL	0.05	16							1		1	1	5		2	2	1	2	1			



TABLE C76  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
WRIGHT-PATTERSON AFB, OHIO

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	15.36	879									5	275	500	75								
1 7	9.12	556									13	214	295	12								
3 9	7.99	462									2	206	234									
TOTAL	32.47	1897									20	695	1007	95								

TABLE C76  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
WRIGHT-PATTERSON AFB, OHIO

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	6	1.51									1	55	73	9								1
1	7	0.34							1	0	30	141	115	30	14							1
TOTAL	1.85	488						1	1	0	31	196	188	47	14							2

TABLE C75  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
WRIGHT-PATTERSON AFB, OHIO

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	6	0.81							3	19	82	247	173	147	90	10	1					
3	9	0.90					2	1	3	14	90	219	107	44	5	1						
TOTAL	1.71	1306					2	1	6	33	178	466	280	193	95	11	1					

TABLE C754  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
WRIGHT-PATTERSON AFB, OHIO

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1	6	0.05	73						5	3	13	13	10	17	6	3	3					
3	9	0.05	42					2	1		5	0	0	5	6	4	1	2				
TOTAL	0.10	115						2	1	5	8	21	21	15	23	10	4	5				



TABLE C76a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF MISSION PHASE  
FOR DATA ACQUIRED AT  
YOKOTA AB, JAPAN

CU-PH BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	25.10	1270								4	111	595	602	26								
1 4	45.00	2070								3	107	777	1000	100	7							
1 5	41.04	1940								1	71	737	714	25								
1 6	4.00	523										209	303	11								
1 7	0.12	16										4	12									
1 9	0.27	301										2	152	146								
1 10	83.93	4327								15	141	1504	2311	104	9					1	2	
2 3	0.00	81										1	34	44								
2 4	23.07	417										4	197	210	5							
2 5	16.26	202										7	113	102		1						
2 8	0.06	200										1	102	172	11							
2 10	81.17	2177									1	60	911	1137	40							
3 3	29.39	1350							1	0	05	504	502	139	25	4						
3 4	20.99	770										16	354	347	7							
3 5	1.11	0											1	5								
3 8	13.44	603										1	190	405	5							
3 9	0.49	576										1	207	305	7							
3 10	100.00	3100																		2		
4 3	14.61	1700							1	4	20	159	1325	1461	112	16	7	1				
4 4	11.07	204								1	0	150	499	400	50	2						
4 7	0.01	73											11	112	79	7						
4 8	14.20	1300											40	52	1							
4 9	10.99	400									1	00	593	663	49							
4 10	91.02	801											20	210	225	15						
5 3	10.40	100											15	309	400	9						
5 4	10.07	100											1	59	36	6						
5 7	0.44	363											2	51	145							
5 8	0.31	301											4	173	102	4						
5 9	1.11	110											29	105	133	4						
5 10	49.03	1410												20	95							
TOTAL	793.96	26262							1	6	64	1131	10705	13932	609	61	11	1		1	4	

TABLE C76b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
YOKOTA AB, JAPAN

CU-PH BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 4	0.44	537							4	25	66	136	164	79	39	4						
1 9	0.33	350								16	69	79	101	75	15	2						
1 10	5.01	4475								252	676	1051	1003	770	329	112	23	10	5			
2 4	0.14	244								0	05	52	90	53	22	1	1	1				
2 10	10.14	4004								142	377	715	1139	1073	834	332	159	62	43	6	1	
3 4	0.99	1001								2	4	26	130	309	312	143	58	15	1			
3 9	1.20	1202								3	20	91	208	540	322	179	80	15	4			
3 10	4.44	4140								114	320	700	804	1091	605	229	95	57	11			
4 4	0.10	804								5	34	124	190	226	211	71	11	4	1			
4 9	0.68	547								21	73	134	61	42	100	50	20	5	2	1	1	
4 10	1.16	2502								35	120	497	501	620	436	122	15	10	6			
5 7	0.62	531								3	24	87	151	157	80	17	4					
5 8	0.44	579								8	21	55	102	101	119	109	45	0	6	1		
5 9	0.65	609								9	41	94	130	150	151	140	47	14	12	2		
5 10	5.97	2594								20	151	423	761	725	612	209	36	15	29	1		
TOTAL	24.04	25001								3	13	74	181	594	1714	4100	3073	6262	4953	1607	919	179



TABLE C74  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
YOKOTA AB, JAPAN

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	1.91	1371					1	2	20	96	233	233	304	249	101	29	5	4				
1 4	7.24	4964					0	20	61	217	628	1340	1900	609	315	91	21	16	2			
1 5	4.24	3057						0	37	112	373	774	1126	471	104	38	9	5				
2 3	0.78	605							2	7	60	272	270	60	15	1						
2 4	3.10	1991							7	37	261	670	632	296	70	15	2	1				
2 5	1.12	810				1	4	12	33	74	160	89	299	109	42	23	7		1			
3 3	1.15	574							3	10	59	173	199	90	22	6	1	1				
3 4	5.14	3976						9	19	99	174	935	1230	1263	405	163	60	13	7	3		
3 5	0.62	600						5	3	16	30	130	130	145	120	34	13	4	2			
4 1	1.79	1555				2	5	0	24	110	264	309	353	236	111	41	21	9				
4 4	1.05	1697				2	6	4	18	48	204	222	954	242	60	16	3	2				
4 7	1.13	506						1	4	24	119	235	70	104	31	11	2			1		
5 3	3.00	2366						2	26	75	270	722	711	390	106	29	6	1				
5 4	1.59	1386					1	6	21	61	223	354	304	287	90	24	9	4				
TOTAL	35.02	25700				5	39	65	359	1091	3525	7151	7854	3760	1292	405	183	52	7			

TABLE C744  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
YOKOTA AB, JAPAN

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (%)																				
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 3	0.15	157			1	2	1		9	21	23	13	23	22	12	8	7	9	4	1			
1 4	0.45	467			2	2	17	10	19	30	52	80	70	95	43	23	10	13	1	1			
1 5	0.25	212					1	7	9	17	31	37	30	24	19	12	0	0					
2 3	0.35	63						2	7	6	0	3	6	11	10	7	1	1					
2 4	0.20	179				1	2	2	3	13	19	49	42	29	9	6	1	3					
2 5	0.10	114					3	5	9	13	13	7	13	16	12	6	6	6	5				
3 3	0.05	55					2	2	6	2	6	13	3	8	0	2	1	2		2			
3 4	0.30	320				1	3	4	13	15	20	55	50	91	43	14	11	13	8	1	1		
3 5	0.05	47		1				2		3	5	8	5	5	4	3	1	2	1	2			
4 3	0.10	112	1		4	2	2	1	6	11	24	14	3	9	13	4	4	7	3	2	1	1	
4 4	0.15	160					2	2	10	15	24	24	20	39	12	6	4	10	4				
4 7	0.05	65			1		6	2	7	6	6	5	6	6	6	6	6	6					
5 3	0.20	230			2	1	6	6	17	20	40	20	24	35	23	14	7	3	4	1			
5 4	0.10	114					1	7	4	3	6	19	11	17	15	10	3	6	6				
TOTAL	7.20	2311	1	1	11	12	95	57	129	200	327	340	320	312	220	119	61	62	23	9	1		



TABLE C77a  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAXI MISSION PHASE  
FOR DATA ACQUIRED AT  
YOUNGSTOWN RUNW, OHIO

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	21.74	418								1	12	200	137	2								
1 6	9.53	49										21	48									
TOTAL	37.27	487								1	12	227	185	2								

TABLE C77b  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
TAKE-OFF RUN MISSION PHASE  
FOR DATA ACQUIRED AT  
YOUNGSTOWN RUNW, OHIO

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 5	0.33	135					2		1	5	9	46	51	13	6	2						
TOTAL	0.33	135					2		1	5	9	46	51	13	6	2						

TABLE C77c  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING ROLL-OUT MISSION PHASE  
FOR DATA ACQUIRED AT  
YOUNGSTOWN RUNW, OHIO

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	0.39	201							4	8	27	53	48	50	11	6	4					
TOTAL	0.39	201							4	8	27	53	48	50	11	6	4					

TABLE C77d  
DISTRIBUTION OF GROUND LOAD FACTORS  
FOR THE  
LANDING IMPACT MISSION PHASE  
FOR DATA ACQUIRED AT  
YOUNGSTOWN RUNW, OHIO

CM-FW BLOCK	BLOCK TIME (MIN.)	TOTAL PEAKS	LOAD FACTOR DISTRIBUTION (G)																			
			0.0	0.3	0.5	0.6	0.7	0.75	0.80	0.85	0.90	0.95	1.05	1.10	1.15	1.20	1.25	1.3	1.4	1.5	1.7	2.0
1 6	0.05	23							2	2	2	3	2	3	2	3	2					
TOTAL	0.05	23							2	2	2	3	2	3	2	3	2					



PRECEDING PAGE BLANK - NOT FIXED

APPENDIX D

ATMOSPHERIC TURBULENCE STUDY DATA



TABLE D1

List of Routes Over Which Atmospheric  
Turbulence Study Data was Acquired

Route Flown	Total Time (Hours)	Total Distance (Nautical Miles)
Alameda NAS, California - (local)	0.77	283.0
Alameda NAS, California - Classified	8.20	2894.1
Anderson AB, Guam - Yokota AB, Japan	1.18	485.3
Anderson AB, Guam - Kadena AB, Okinawa	6.63	2642.8
Anderson AB, Guam - Mactan Island A/D, Cebu, Philippines	3.50	1375.4
Anderson AB, Guam - Saigon, Tan Son Nhut A/D, Vietnam	9.67	4221.9
Anderson AB, Guam - Don Muang A/D, Bangkok, Thailand	6.76	2851.5
Andrews AFB, Washington D. C. - Robins AFB, Georgia	1.61	642.8
Andrews AFB, Washington D. C. - McGuire AFB, New Jersey	0.65	166.6
Andrews AFB, Washington D. C. - Rhein Main A/D, Germany	8.59	3746.0
Andrews AFB, Washington D. C. - Howard AFB, Canal Zone	5.18	2224.9
Ascension Islands, South Atlantic - Zandery AD, Surinam	3.80	1647.0
Ascension Islands, South Atlantic - Guararapes, Recife, Brazil	3.07	1226.2
Asuncion, Paraguay - Buenos Aires, Argentina	1.77	650.7
Birmingham Municipal, Alabama - McCoy AFB, Florida	1.15	423.8
Brazilia, Brazil - Rio De Janeiro, Brazil	1.22	579.0
Buckley ANG Base, Colorado - (local)	2.04	701.0
Caracas, Venezuela - Brazilia, Brazil	4.89	2118.2
Charleston AFB/Municipal, South Carolina - (local)	287.77	72919.0
Charleston AFB/Municipal, South Carolina - McGuire AFB, New Jersey	9.21	3176.7
Charleston AFB/Municipal, South Carolina - Quonset Point NAS, Rhode Island	2.55	839.8
Charleston AFB/Municipal, South Carolina - Griffis AFB, New York	1.74	687.1
Charleston AFB/Municipal, South Carolina - Dobbins AFB/NAS, Georgia	4.93	1477.1
Charleston AFB/Municipal, South Carolina - Langley AFB, Virginia	1.11	366.1



TABLE D1 continued

Route Flown	Total Time (Hours)	Total Distance (Nautical Miles)
Charleston AFB/Municipal, South Carolina - Elgin AFB, Florida	6.31	2430.0
Charleston AFB/Municipal, South Carolina - Laurence G. Hanscom Field, Massachusetts	1.91	736.2
Charleston AFB/Municipal, South Carolina - Seymour Johnson AFB, North Carolina	0.65	213.8
Charleston AFB/Municipal, South Carolina - Rhein Main A/D, Germany	8.78	3763.3
* Charleston AFB/Municipal, South Carolina - Torrejon De Ardoz AB, Spain	32.01	13499.5
Charleston AFB/Municipal, South Carolina - Rota NS, Spain	8.91	3757.2
Charleston AFB/Municipal, South Carolina - Toul Rosieres AB, France	8.63	3760.3
Charleston AFB/Municipal, South Carolina - Howard AFB, Canal Zone	9.16	3693.4
Charleston AFB/Municipal, South Carolina - Zandery AD, Surinam	6.69	2688.6
Charleston AFB/Municipal, South Carolina - Guararapes, Recife, Brazil	8.82	3766.6
Chateauroux AB, France - Lajes A/D, Azores	4.01	1835.2
Clark AB, Philippines - (local)	4.22	1717.8
* Clark AB, Philippines - Anderson AB, Guam	29.37	11886.4
* Clark AB, Philippines - Yokota AB, Japan	94.61	39761.2
Clark AB, Philippines - Kadena AB, Okinawa	14.19	5878.4
Clark AB, Philippines - Mactan Island A/D, Cebu, Philippines	4.57	1902.4
* Clark AB, Philippines - Saigon, Tan Son Nhut A/D, Vietnam	79.91	32150.6
Clark AB, Philippines - Don Muang A/D, Bangkok, Thailand	11.59	4905.9
Clark AB, Philippines - Pleiku A/D, Vietnam	3.98	1470.0
Clark AB, Philippines - Ubon A/D, Thailand	2.97	1234.1
Clark AB, Philippines - Udorn A/D, Thailand	3.00	1276.8
Dhahran A/D, Saudi Arabia - Karachi Civil A/D, Pakistan	8.24	3371.1
* Don Muang A/D, Bangkok, Thailand - New Delhi/Palam A/D, India	22.80	9687.3
Dover AFB, Delaware - (local)	281.57	76821.1
* Dover AFB, Delaware - Charleston AFB/Municipal, South Carolina	27.53	10331.3
Dover AFB, Delaware - McGuire AFB, New Jersey	0.51	118.1



TABLE D1 continued

Route Flown	Total Time (Hours)	Total Distance (Nautical Miles)
Dover AFB, Delaware - Quonset Point NAS, Rhode Island	0.88	297.1
Dover AFB, Delaware - Dobbins AFB/NAS, Georgia	16.35	6222.6
Dover AFB, Delaware - Birmingham Municipal, Alabama	1.88	751.9
Dover AFB, Delaware - McCoy AFB, Florida	2.14	843.7
Dover AFB, Delaware - Norfolk NAS, Virginia	0.62	163.1
Dover AFB, Delaware - Lakehurst NAS, New Jersey	10.63	2789.6
Dover AFB, Delaware - Elgin AFB, Florida	2.18	870.1
Dover AFB, Delaware - Pope AFB, North Carolina	4.95	1314.6
Dover AFB, Delaware - Laurence G. Hanscom Field, Massachusetts	1.97	636.1
* Dover AFB, Delaware - Chateauroux AB, France	41.12	18130.9
Dover AFB, Delaware - Mildenhall A/D, England	16.61	7242.4
Dover AFB, Delaware - Lajes A/D, Azores	3.55	1565.9
Dover AFB, Delaware - Rhein Main A/D, Germany	7.97	3257.2
Dover AFB, Delaware - Lyneham A/D, England	6.79	2920.2
Dover AFB, Delaware - Bodo A/D, Norway	11.91	5153.3
Elmendorf AFB, Alaska - (local)	0.87	301.7
Elmendorf AFB, Alaska - North Island NAS, California	5.00	2025.7
* Elmendorf AFB, Alaska - Dover AFB, Delaware	157.34	67083.3
* Elmendorf AFB, Alaska - Charleston AFB/Municipal, South Carolina	55.79	23542.7
* Elmendorf AFB, Alaska - McGuire AFB, New Jersey	24.49	10301.7
Elmendorf AFB, Alaska - Quonset Point NAS, Rhode Island	15.95	6813.9
Elmendorf AFB, Alaska - Elgin AFB, Florida	8.35	3670.4
* Elmendorf AFB, Alaska - Laurence G. Hanscom Field, Massachusetts	24.72	10365.3
* Elmendorf AFB, Alaska - Yokota AB, Japan	259.32	111092.7
Elmendorf AFB, Alaska - Kadena AB, Okinawa	5.81	2455.6
El Paso International, Texas - Dover AFB, Delaware	8.15	3349.2
El Toro MCAS, California - Kadena AB, Okinawa	12.82	5291.7



TABLE D1 continued

Route Flown	Total Time (Hours)	Total Distance (Nautical Miles)
England AFB, Louisiana - Dobbins AFB/NAS, Georgia	1.40	508.5
Hickam AFB, Hawaii - (local)	3.01	823.6
* Hickam AFB, Hawaii - Wake Airport, Wake Island	79.62	33948.2
* Hickam AFB, Hawaii - Clark AB, Philippines	134.27	57173.2
* Hickam AFB, Hawaii - Anderson AB, Guam	98.32	42179.8
* Hickam AFB, Hawaii - Yokota AB, Japan	22.28	9332.6
Hickam AFB, Hawaii - Naha AB, Okinawa	7.72	3390.0
Hickam AFB, Hawaii - Christ Church, New Zealand	19.55	8349.6
Hunter AFB, Georgia - McCoy AFB, Florida	0.77	250.5
* Kadena AB, Okinawa - Saigon, Tan Son Nhut A/D, Vietnam	21.32	8904.3
Kadena AB, Okinawa - Danang AB, Vietnam	3.50	1344.8
Kadena AB, Okinawa - Don Muang A/D, Bangkok, Thailand	4.16	1334.3
Kadena AB, Okinawa - Kimpo International Airport, Seoul, Korea	1.98	768.8
Karachi Civil A/D, Pakistan - New Delhi/Palam A/D, India	10.52	4039.6
Karachi Civil A/D, Pakistan - Nha Trang AD, Vietnam	2.86	1055.7
Kelly AFB, Texas - Alameda NAS, California	3.07	1254.8
* Kelly AFB, Texas - Elmendorf AFB, Alaska	76.18	32860.2
Kelly AFB, Texas - Scott AFB, Illinois	4.14	1637.4
* Kelly AFB, Texas - Dover AFB, Delaware	23.80	9879.0
Kelly AFB, Texas - Charleston AFB/Municipal, South Carolina	14.33	5850.3
Kelly AFB, Texas - Hunter AFB, Georgia	2.92	1145.7
Kelly AFB, Texas - Quonset Point NAS, Rhode Island	4.74	2047.2
Kelly AFB, Texas - Hickam AFB, Hawaii	17.92	7493.5
Lajes A/D, Azores - Sigonella A/D, Italy	5.13	2159.5
Lowry AFB, Colorado - Dover AFB, Delaware	4.22	1803.2
McClellan AFB, California - Lowry AFB, Colorado	2.88	1096.3
McClellan AFB, California - Hickam AFB, Hawaii	1.07	456.5
McGuire AFB, New Jersey - Griffis AFB, New York	0.95	312.3
McGuire AFB, New Jersey - Hickam AFB, Hawaii	6.27	2709.4



TABLE D1 continued

Route Flown	Total Time (Hours)	Total Distance (Nautical Miles)
McGuire AFB, New Jersey - Mildenhall A/D, England	7.45	3278.9
* McGuire AFB, New Jersey - Rhein Main A/D, Germany	108.55	46861.9
Nellis AFB, Nevada - Wake Airport, Wake Island	10.55	4724.9
Norfolk NAS, Virginia - Lajes A/D, Azores	5.26	2222.7
North Island NAS, California - Charleston AFB/Municipal, South Carolina	4.84	1912.7
Point Mugu NAS, California - Hickam AFB, Hawaii	6.45	2777.9
Rhein Main A/D, Germany - Lyneham A/D, England	1.22	464.0
Rhein Main A/D, Germany - Bodo AD, Norway	6.35	2638.6
Rhein Main A/D, Germany - Goose Bay, Labrador	5.00	2169.6
Rio De Janeiro, Brazil - Asuncion, Paraguay	2.24	874.6
Robins AFB, Georgia - Dover AFB, Delaware	13.12	4952.5
Robins AFB, Georgia - McCoy AFB, Florida	0.96	323.1
Saigon, Tan Son Nhut A/D, Vietnam - Danang AB, Vietnam	0.96	398.1
Saigon, Tan Son Nhut A/D, Vietnam - Don Muang A/D, Bangkok, Thailand	10.30	3838.2
Scott AFB, Illinois - Andrews AFB, Washington D. C.	1.65	640.9
Scott AFB, Illinois - Dover AFB, Delaware	3.77	1481.6
Scott AFB, Illinois - Charleston AFB/Municipal, South Carolina	6.22	2322.9
Scott AFB, Illinois - McGuire AFB, New Jersey	2.44	943.3
Scott AFB, Illinois - Buckley ANG Base, Colorado	3.75	1476.7
Seymour Johnson AFB, North Carolina - Bodo AD, Norway	7.42	3063.3
Shaw AFB, South Carolina - Toul Rosieres AB, France	2.39	1035.1
Sheppard AFB, Texas - Charleston AFB/Municipal, South Carolina	2.68	1076.2
* Tinker AFB, Oklahoma - Travis AFB, California	32.19	13054.3
Tinker AFB, Oklahoma - Dallas Love Field, Texas	0.66	200.4
Tinker AFB, Oklahoma - Robins AFB, Georgia	1.84	737.9



TABLE D1 continued

Route Flown	Total Time (Hours)	Total Distance (Nautical Miles)
Tinker AFB, Oklahoma - Dover AFB, Delaware	3.08	1229.8
Tinker AFB, Oklahoma -		
Charleston AFB/Municipal, South Carolina	2.02	825.4
Torrejon De Ardoz AB, Spain -		
Rota NS, Spain	1.07	375.3
* Torrejon De Ardoz AB, Spain -		
Dhahran A/D, Saudi Arabia	21.24	9009.1
Torrejon De Ardoz AB, Spain -		
Karachi Civil A/D, Pakistan	3.77	1634.3
Travis AFB, California - (local)	415.52	95489.9
Travis AFB, California -		
Portland International, Oregon	2.57	940.2
Travis AFB, California -		
McChord AFB, Washington	3.06	1205.6
Travis AFB, California -		
Dallas Love Field, Texas	3.95	1615.6
Travis AFB, California -		
Holloman AFB, New Mexico	4.74	1863.5
* Travis AFB, California - Kelly AFB, Texas	24.43	10316.4
Travis AFB, California -		
James Connally AFB, Texas	4.13	1629.6
Travis AFB, California -		
Yuma MCAS/International, Arizona	4.99	1628.5
Travis AFB, California - Nellis AFB, Nevada	1.14	425.7
Travis AFB, California -		
Elmendorf AFB, Alaska	13.92	5863.5
Travis AFB, California -		
Point Mugu NAS, California	0.85	291.6
Travis AFB, California -		
England AFB, Louisiana	4.77	2030.3
Travis AFB, California - Hill AFB, Utah	5.78	2199.1
Travis AFB, California -		
Stewart AFB, New York	12.24	4931.3
Travis AFB, California - Scott AFB, Illinois	3.74	1556.7
Travis AFB, California -		
Andrews AFB, Washington D. C.	6.37	2651.8
Travis AFB, California - Robins AFB, Georgia	5.59	2397.7
* Travis AFB, California - Dover AFB, Delaware	40.02	16648.9
* Travis AFB, California -		
Charleston AFB/Municipal, South Carolina	22.47	9545.1
* Travis AFB, California -		
McGuire AFB, New Jersey	23.66	10001.6
Travis AFB, California -		
Quonset Point NAS, Rhode Island	14.09	5933.9



TABLE D1 concluded

Route Flown	Total Time (Hours)	Total Distance (Nautical Miles)
Travis AFB, California - Langley AFB, Virginia	6.49	2702.7
* Travis AFB, California - Hickam AFB, Hawaii	289.95	122210.1
* Travis AFB, California - Wake Airport, Wake Island	454.29	191945.8
* Travis AFB, California - Yokota AB, Japan	159.89	67797.6
Travis AFB, California - Classified	4.45	1640.2
* Wake Airport, Wake Island - Clark AB, Philippines	164.09	70231.2
Wake Airport, Wake Island - Anderson AB, Guam	9.90	4014.2
Wake Airport, Wake Island - Yokota AB, Japan	6.31	2324.4
Wake Airport, Wake Island - Mactan Island A/D, Cebu, Philippines	6.69	2858.5
* Wake Airport, Wake Island - Saigon, Tan Son Nhut A/D, Vietnam	20.73	8935.0
Yokota AB, Japan - (local)	1.37	250.4
Yokota AB, Japan - Kadena AB, Okinawa	13.97	5667.6
Yokota AB, Japan - Naha AB, Okinawa	1.95	735.9
* Yokota AB, Japan - Saigon, Tan Son Nhut A/D, Vietnam	119.66	50911.8
Yokota AB, Japan - Danang AB, Vietnam	19.94	8388.6
Yokota AB, Japan - Don Muang A/D, Bangkok, Thailand	6.00	2486.9
Yokota AB Japan - Ubon A/D, Thailand	10.87	4512.1
Yokota AB, Japan - Kimpo International Airport, Seoul, Korea	1.94	740.0
Yuma MCAS/International, Arizona - (local)	16.28	4027.5

\* Routes for which data is included in the composited Atmospheric Turbulence Study data sample



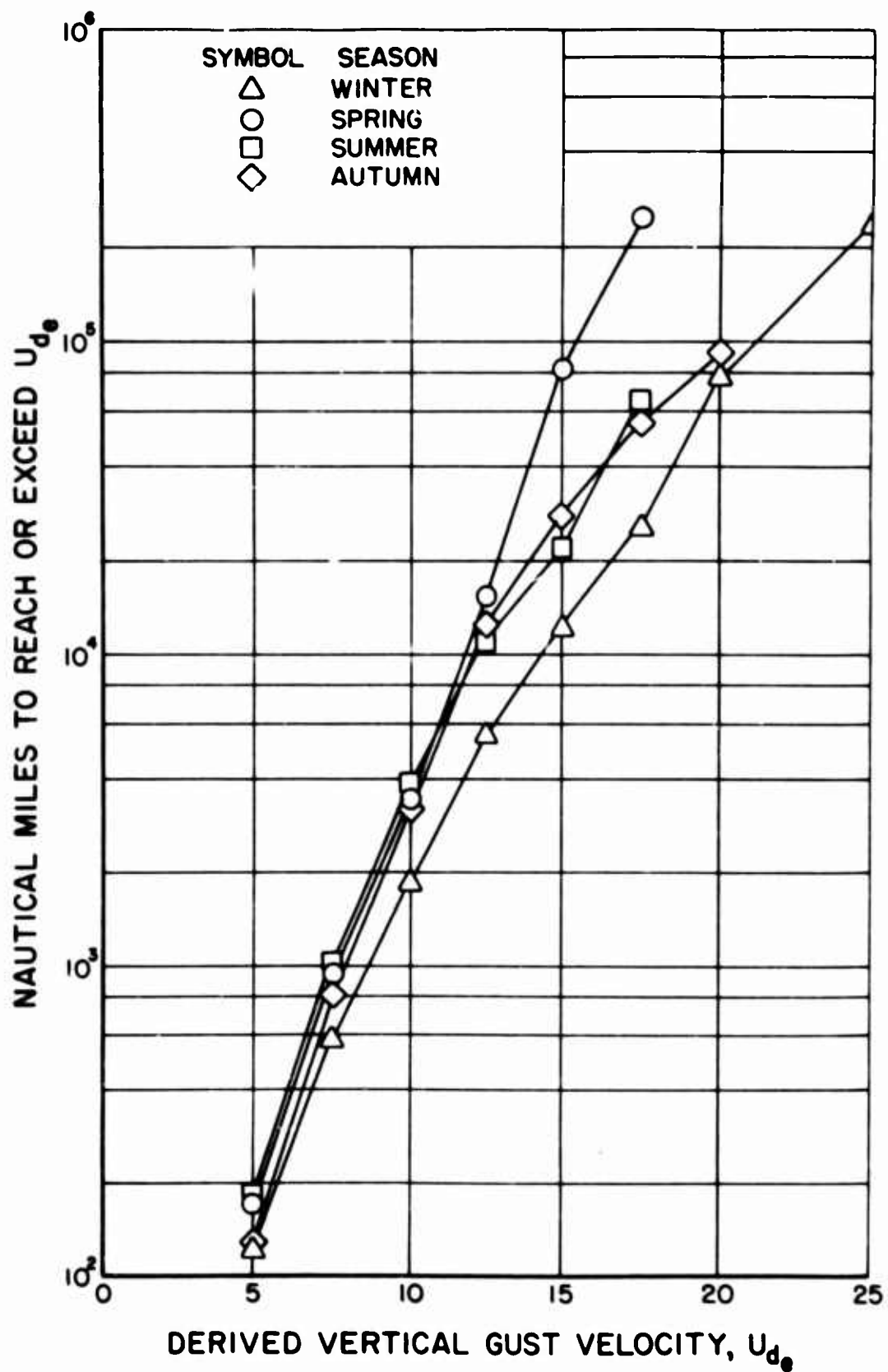


Figure D1. Comparison of the Positive Derived Vertical Gust Velocity Spectra by Season for Altitudes Greater than 30,000 feet



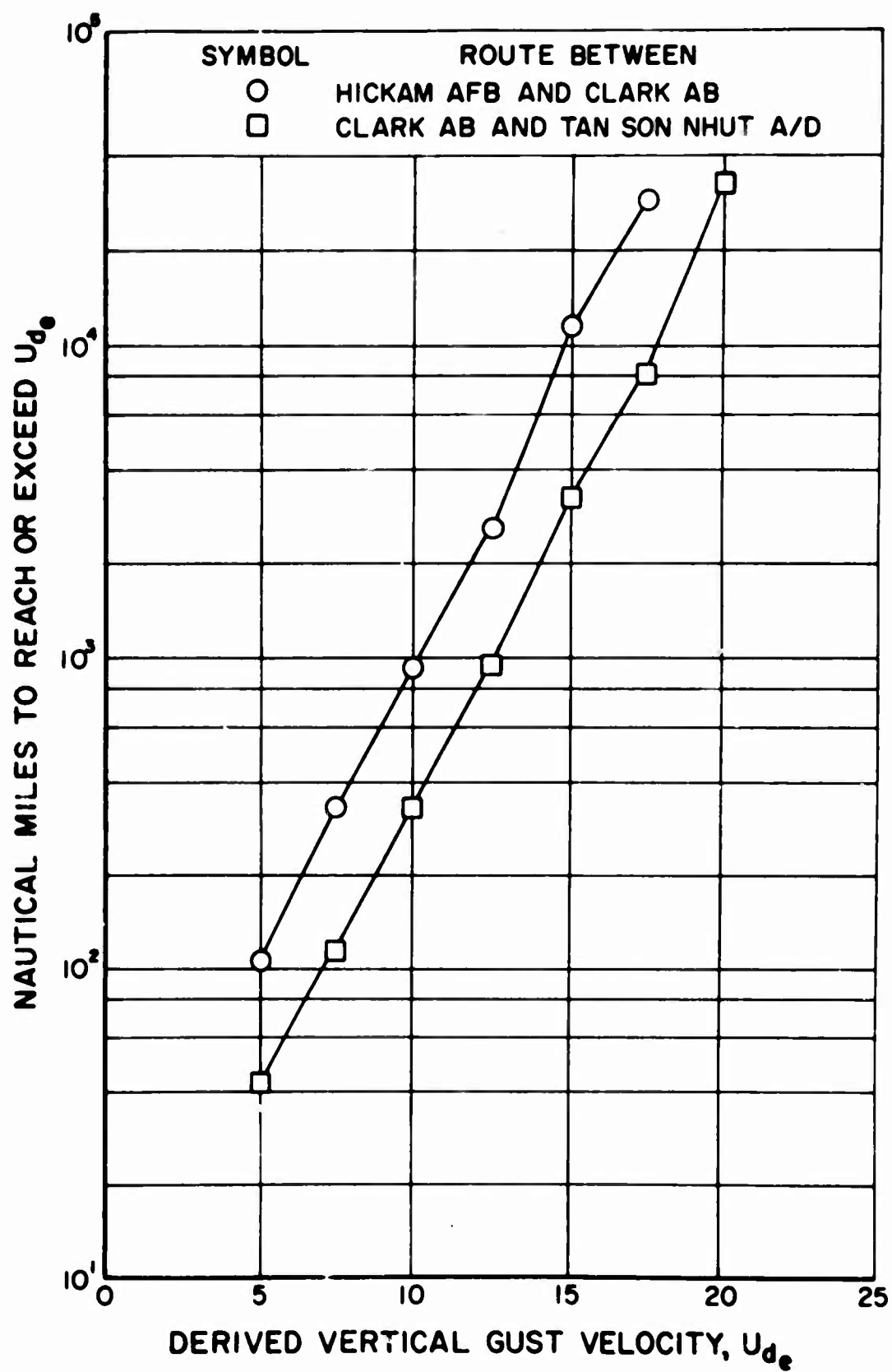


Figure D2. Comparison of the Positive Derived Vertical Gust Velocity Spectra of Two Routes Encountered in the Atmospheric Turbulence Study



TABLE D2a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0	0	0																				
1 TO 2	0	0	0																				
2 TO 5	0	0	0																				
5 TO 10	0	0	0																				
10 TO 15	0	0	0																				
15 TO 20	44.18	16063.9	560					1	6	4	16	43	159	249	48	21	6	4	1	1			1
20 TO 25	75.87	30080.8	1382				2	1	1	11	25	86	369	683	131	42	9	4	2	1			
25 TO 30	196.58	82251.8	1450			1		2	5	12	29	102	447	680	124	28	13	4	1	2			
30 TO 35	832.86	361453.4	4575				2	1	3	17	71	227	1412	2326	358	116	20	13	7	1	1		
ABOVE 35	351425.98	22923.9	6175				1		9	12	89	379	2056	2987	493	139	29	7	3	1			
TOTAL	2557.46	1112758.8	14142			1	5	5	24	56	225	837	4461	6925	1154	316	77	32	14	6	1	1	

STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	14.42	2222.2	2603				1	3	9	38	132	365	471	555	538	283	139	40	19	8	2		
1 TO 2	24.90	4116.6	3208			1	1	5	5	35	108	358	792	986	671	214	70	21	9	2			
2 TO 5	52.74	11381.8	5122		1		2	9	20	53	154	489	1319	1945	736	258	90	26	12	6	1	1	
5 TO 10	42.17	12143.0	1929				2	2	3	11	41	143	542	849	213	79	26	13	3	1	1		
10 TO 15	37.79	12567.5	800			1	1	3	2	8	15	58	225	359	70	36	14	8					
15 TO 20	1.98	708.9	30									3	9	13	4								
20 TO 25	4.27	1667.5	135								2	6	39	72	12		1						
25 TO 30	6.25	2644.0	125									8	37	41	9		1						
30 TO 35	12.98	5573.1	492					1	4	6	9	28	142	234	48	12	4	2	1		1		
ABOVE 35	3.73	13804.7	261					1	3	4	3	20	73	114	19	10	6	3	1	3			
TOTAL	128.53	66820.3	14680		1	2	8	24	46	157	464	1478	3651	5168	2250	695	351	114	45	20	5	1	

STORM PLUS NON-STORM																						
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	WIND DISTRIBUTION	FT./SEC.	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	14.42	222.2	2603				1	3	9	38	132	365	471	555	538	283	139	40	19	8	2	
1 TO 2	24.90	4116.6	3208			1	1	5	5	35	108	358	792	986	601	214	70	21	9	2		
2 TO 5	52.74	11381.8	5122		1		2	9	20	53	154	489	1319	1945	736	258	90	26	12	6	1	1
5 TO 10	42.17	12143.0	1929				2	2	3	11	41	143	542	849	213	79	26	13	3	1	1	
10 TO 15	37.79	12567.5	800			1	1	3	2	8	15	58	225	359	70	36	14	8				
15 TO 20	46.16	16772.8	590					1	6	4	16	46	168	262	52	21	6	5	1	1		1
20 TO 25	80.13	31729.3	1512				2	1	1	11	20	92	428	755	143	42	15	4	2	1		
25 TO 30	254.83	84895.9	1555			1		2	5	14	31	110	486	721	133	31	14	4	1	2		
30 TO 35	845.84	367223.5	5067				2	2	7	23	80	255	1554	2560	406	128	24	15	8	1	2	
ABOVE 35	351436.71	636728.5	6436				2	1	12	16	92	399	2129	3101	512	119	35	10	4	4		
TOTAL	2785.79	1179579.0	28822		1	3	13	29	70	213	689	2315	8114	12093	3424	1211	428	146	59	26	6	2



### NUM-STORM CONDITIONS

### STORM CONDITIONS

STORM PLUS NON-STORM**TABLE D2c**

### NON-STORM CONDITIONS

### STORM CONDITIONS

**STORM PLUS NON-STORM**

294



TABLE D2d  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	1.00	1.00	1																					
1 TO 2	1.00	1.00	1																					
2 TO 5	1.00	1.00	1																					
5 TO 10	1.00	1.00	1																					
10 TO 15	1.00	1.00	1																					
15 TO 20	12.32	4495.0	280							3	2	8	28	64	118	31	16	6	4			1		
20 TO 25	17.51	6972.4	280						1	3	3	16	75	149	24	8	2							
25 TO 30	22.80	9756.9	109									6	31	59	0	2	2							
30 TO 35	236.91	123179.6	1233							1	9	23	57	259	489	86	27	6	7	4				
ABOVE 35	345.22	152103.1	1440						1	1	4	18	89	517	691	132	18	5	1					
TOTAL	634.34	276513.7	3112				2	1	5	19	52	196	973	1526	250	71	21	12	5	1				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	3.39	513.0	661																				
1 TO 2	7.27	1209.1	887																				
2 TO 5	11.78	2587.5	1175																				
5 TO 10	9.71	2829.8	436																				
10 TO 15	9.23	3081.4	211																				
15 TO 20	11.15	56.1	0																				
20 TO 25	11.30	238.4	0																				
25 TO 30	2.55	1494.2	11																				
30 TO 35	2.22	92.0	0																				
ABOVE 35	2.41	1359.6	8																				
TOTAL	47.22	12732.8	3389																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	3.39	513.0	661																				
1 TO 2	7.27	1209.1	887																				
2 TO 5	11.78	2587.5	1175																				
5 TO 10	9.71	2829.8	436																				
10 TO 15	9.23	3081.4	211																				
15 TO 20	12.47	4556.9	280																				
20 TO 25	18.11	714.8	280																				
25 TO 30	25.43	10851.0	120																				
30 TO 35	237.13	133272.3	1233																				
ABOVE 35	147.43	153162.7	1440																				
TOTAL	682.17	289243.5	6521																				

TABLE D2e  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

FOR THE  
AUTUMN SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.00	1.00	1																				
1 TO 2	1.00	1.00	1																				
2 TO 5	1.00	1.00	1																				
5 TO 10	1.00	1.00	1																				
10 TO 15	1.00	1.00	1																				
15 TO 20	1.77	3855.0	82																				
20 TO 25	22.98	9190.5	531																				
25 TO 30	66.82	27668.3	827																				
30 TO 35	286.41	122587.2	1072																				
ABOVE 35	332.77	145955.5	1274																				
TOTAL	719.75	308665.3	4586																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	4.31	649.6	652							1	11	33	95	121	145	135	40	37	6	6	2		
1 TO 2	6.25	1062.6	777							7	29	92	167	247	144	46	19	2	2				
2 TO 5	13.10	2825.0	901					4	11	31	76	236	393	119	45	16	6	3	1				
5 TO 10	11.99	3409.9	365							3	6	10	197	154	37	20	2	3					
10 TO 15	11.99	3407.1	199				1	1		2	5	9	39	60	9	7	2	4					
15 TO 20	1.35	678.2	14										4	8	2								
20 TO 25	1.87	779.0	26										2	3	16	4							
25 TO 30	1.92	779.0	10											2	7	1							
30 TO 35	7.35	3157.3	150						1		3	13	40	73	17	3							
ABOVE 35	6.13	2632.5	104				1	1	3	1	1	15	27	27	10	5	6	3	1	3			
TOTAL	66.86	19262.7	3146	1	4	2	9	35	130	332	774	1090	460	106	83	24	12	6					

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	4.31	649.6	652																				
1 TO 2	6.25	1062.6	777							1	11	33	95	121	149	135	60	37	6	2			
2 TO 5	13.10	2825.0	901						4	11	31	76	236	353	119	45	16	6	3	1			
5 TO 10	11.99	3409.9	365								3	6	30	107	154	77	20	2	3				
10 TO 15	11.99	3467.1	199			1	1				2	5	9	39	60	9	7	2	4				
15 TO 20	12.12	3334.1	96										1	35	52	0							
20 TO 25	24.95	9970.3	557				2		1	8	16	47	158	243	56	15	8	3	1	1			
25 TO 30	66.73	27668.2	837			1		1	3	9	37	63	241	383	99	20	0	4	1	2			
30 TO 35	793.76	129764.5	2332					2	3	27	83	165	1077	194	39	9	4	1					
ABOVE 35	198.92	148986.0	1378					1	3	2	12	60	391	747	116	23	7	3	1	3			
TOTAL	784.61	127906.1	7732			2	7	3	14	94	149	565	2164	3461	859	273	100	33	15	9			



TABLE D2f  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

FOR THE  
MONTH OF JANUARY

NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT.)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	9.36	1040.2	27																				
20 TO 25	10.13	4311.0	252																				
25 TO 30	23.42	8995.7	25																				
30 TO 35	62.28	25734.3	465																				
ABOVE 35	149.76	66792.2	222																				
TOTAL	245.42	106969.4	991																				

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	UDE DISTRIBUTION (FT./SEC.)																			
(1000 FT.)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.73	256.4	340							1	6	21	53	63	63	62	32	12	5	1	1		
1 TO 2	2.66	447.5	326			1				2	2	15	36	92	115	62	16	6	3	1			
2 TO 5	5.49	1190.4	481							1	2	15	39	143	196	94	23	6	2				
5 TO 10	3.71	1130.6	142							1	5	8	45	61	21	6							
10 TO 15	4.20	1415.5	86							1	3	1	12	25	31	8	2	2	1				
15 TO 20	0.09	34.6	0																				
20 TO 25	0.11	43.3	0																				
25 TO 30	0.75	331.5	16																				
30 TO 35	0.24	110.0	0									1	8	6	1								
ABOVE 35	6.46	2943.2	3																				
TOTAL	25.46	7809.9	1394			1				5	14	52	149	371	495	180	79	26	11	2	1		

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	UDE DISTRIBUTION (FT./SEC.)																			
(1000 FT.)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.73	256.4	340							1	6	21	53	67	63	62	32	12	5	1			
1 TO 2	2.66	447.5	376							2	2	36	92	115	42	16	6	3	1				
2 TO 5	5.49	1190.4	481							1	2	15	90	143	196	94	23	6	2				
5 TO 10	3.71	1130.6	142								1	5	8	43	61	21	6						
10 TO 15	4.20	1415.5	86							1	3	1	12	25	31	8	2	2	1				
15 TO 20	5.15	1802.9	27									2	3	5	13	2	1			1			
20 TO 25	1.23	4354.3	252									3	20	76	125	18	7						
25 TO 30	21.17	8927.2	41												1	17	21						
30 TO 35	62.30	25815.0	465										14	37	114	250	49	7	2				
ABOVE 35	156.22	69733.4	223									1	16	84	102	15	4	1	1				
TOTAL	276.08	116839.3	2395									5	15	72	229	643	977	273	90	29	13	3	1

TABLE D2g  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

FOR THE  
MONTH OF FEBRUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDF DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.0	0.0	0																					
1 TO 2	0.0	0.0	0																					
2 TO 5	0.0	0.0	0																					
5 TO 10	0.0	0.0	0																					
10 TO 15	0.0	0.0	0																					
15 TO 20	3.17	1145.6	65																					
20 TO 25	5.43	2166.2	103																					
25 TO 30	27.65	11766.4	53																					
30 TO 35	39.69	17250.4	447																					
ABOVE 35	114.99	51559.2	1008																					
TOTAL	196.93	83098.0	1673																					

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	UDE DISTRIBUTION (FT./SEC.)																			
(1000 FT.)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.56	224.0	264								6	12	20	31	51	40	20		1	2			
1 TO 2	2.22	357.7	251				1				6	11	26	61	84	42	15		4	3			
2 TO 5	5.30	1133.2	406				2	2	7	14	53	122	217	64	14	13	1						
5 TO 10	3.56	1629.7	237				1			5	27	90	91	36	11	5	4	1					
10 TO 15	3.23	1649.5	99							5	20	47	5	8	5	1							
15 TO 20	0.20	182.7	4											5	1	1							
20 TO 25	1.61	999.1	92										2	33	51	6							
25 TO 30	0.96	403.3	61										6	21	19	7	3	1					
30 TO 35	3.42	1420.5	332					1	3	6	6	15	92	161	31	9	4	2	1			1	
ABOVE 35	11.55	9129.5	18										7	9	2								
TOTAL	33.20	11447.2	1824				1	4	6	27	90	141	456	731	242	80	55	19	3	2	1		

STORM PLUS NON-STORM

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.56	224.0	264							1	6	12	29	31	51	49	20	26	0	1	2		
1 TO 2	2.22	357.7	251								6	11	24	61	64	42	15	4	3				
2 TO 5	5.30	1133.2	406						2	2	7	14	33	122	217	64	14	1	1				
5 TO 10	3.56	1629.7	237						1			5	27	98	91	36	11	9	4	1			
10 TO 15	3.23	1649.5	99									5	24	47	5	0	5	1					
15 TO 20	3.45	1756.4	60						1	1		3	6	24	25	6	3						
20 TO 25	7.64	2767.3	192										5	62	163	19	3						
25 TO 30	20.59	12169.7	114										0	40	4	0							
30 TO 35	63.30	18678.9	779						1	4	0	10	44	234	362	71	27	8	5	3	1	1	
ABOVE 35	126.34	56688.7	1026						1	1	14	64	333	480	87	27	7	3	1				
TOTAL	224.13	95345.1	3497			1	5	9	30	71	244	993	1916	306	139	66	25	6	3	1			



TABLE DBB  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

FOR THE  
MONTH OF MARCH

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.00	0																				
1 TO 2	0.00	0.00	0																				
2 TO 5	0.00	0.00	0																				
5 TO 10	0.00	0.00	0																				
10 TO 15	0.00	0.00	0																				
15 TO 20	3.11	1190.5	12											6	6								
20 TO 25	9.47	2161.7	13											2	11								
25 TO 30	16.60	4970.1	71											22	17								
30 TO 35	42.60	10000.5	315											93	154	21	12						
ABOVE 35	136.23	61321.8	529											6	48	174	226	43	11		1		1
TOTAL	190.67	88102.6	923											60	297	430	60	25		1	1		1

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.72	107.6	140																				
1 TO 2	1.34	215.3	291																				
2 TO 5	4.96	1007.1	793																				
5 TO 10	3.64	973.7	271																				
10 TO 15	2.41	893.3	31																				
15 TO 20	0.00	0.00	0																				
20 TO 25	0.00	0.00	0																				
25 TO 30	0.00	0.00	0																				
30 TO 35	0.17	75.1	5																				
ABOVE 35	0.00	0.00	0																				
TOTAL	15.68	3190.8	1546																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.72	107.6	140																				
1 TO 2	1.34	215.3	291																				
2 TO 5	4.96	1007.1	793																				
5 TO 10	3.64	973.7	271																				
10 TO 15	2.41	893.3	31																				
15 TO 20	3.11	1190.5	12																				
20 TO 25	9.47	2161.7	13																				
25 TO 30	16.60	4970.1	71																				
30 TO 35	42.63	10090.6	315																				
ABOVE 35	136.27	61330.4	529																				
TOTAL	211.16	91300.4	2464																				

TABLE DBB  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

FOR THE  
MONTH OF APRIL

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.00	0																				
1 TO 2	0.00	0.00	0																				
2 TO 5	0.00	0.00	0																				
5 TO 10	0.00	0.00	0																				
10 TO 15	0.00	0.00	0																				
15 TO 20	2.73	995.7	31																				
20 TO 25	6.75	1827.8	60																				
25 TO 30	9.40	4075.7	40																				
30 TO 35	67.30	29575.9	157																				
ABOVE 35	99.44	43622.5	257																				
TOTAL	100.22	63292.6	545																				

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	144.1	110							1	2	6	17	15	20	25	20	5	2	3			
1 TO 2	1.30	229.3	103							0	0	10	17	41	34	11	5	0	2				
2 TO 5	3.76	816.0	314							1	2	3	31	30	123	68	19	6	1				
5 TO 10	2.04	829.2	299							2	3	0	10	64	91	23	6	7	1	1			
10 TO 15	2.60	817.7	67							1		5	5	14	31	3	6	1	1				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.35	39.9	5																				
ABOVE 35	0.01	304.9	65																				
TOTAL	12.46	3241.7	932						7	13	26	01	211	344	135	64	24	8	7				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.04	144.1	110																				
1 TO 2	1.30	229.3	103																				
2 TO 5	3.76	816.0	314																				
5 TO 10	2.04	829.2	299																				
10 TO 15	2.66	817.7	67																				
15 TO 20	2.73	995.7	31																				
20 TO 25	6.75	1827.8	60																				
25 TO 30	9.40	4075.7	40																				
30 TO 35	67.66	29575.9	157																				
ABOVE 35	100.35	44211.4	322																				
TOTAL	190.66	88394.3	1477																				



TABLE D1J  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

FOR THE  
MONTH OF MAY

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	3.62	1354.6	93																				
20 TO 25	3.80	1503.9	47						1	2	2	5	14	20	4	1							1
25 TO 30	9.85	4009.0	100									1	15	29	2								
30 TO 35	62.48	27774.5	232									3	5	6	30	44	7	4					
ABOVE 35	134.92	99695.9	899									1	3	9	70	116	22	2	1				
TOTAL	214.67	94319.0	1328									6	3	26	48	278	403	79	24	11	1		
												7	9	34	89	415	612	114	20	10	1		1

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.93	141.4	261																					
1 TO 2	1.92	322.0	328																					
2 TO 5	3.50	822.0	613																					
5 TO 10	3.22	895.4	171																					
10 TO 15	2.73	926.5	84																					
15 TO 20	1.27	23.0	11																					
20 TO 25	0.04	16.6	0																					
25 TO 30	0.03	14.3	0																					
30 TO 35	0.80	347.0	0																					
ABOVE 35	1.09	474.2	0																					
TOTAL	14.13	3985.5	1465																					

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.93	141.4	261																				
1 TO 2	1.92	322.0	328																				
2 TO 5	3.50	822.0	610																				
5 TO 10	3.02	895.4	171																				
10 TO 15	2.73	926.5	84																				
15 TO 20	3.69	1376.5	61																				
20 TO 25	3.84	1517.5	47																				
25 TO 30	9.88	4023.3	100																				
30 TO 35	63.28	28122.3	232																				
ABOVE 35	134.41	99170.1	899																				
TOTAL	228.80	98323.5	2793																				

TABLE D2h  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

FOR THE  
MONTH OF JUNE

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	2.54	934.2	36																				
20 TO 25	3.16	1254.0	41																				
25 TO 30	8.51	3683.2	83																				
30 TO 35	56.87	26047.6	158																				
ABOVE 35	96.84	42954.8	287																				
TOTAL	167.98	73466.7	605																				

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WSE DISTRIBUTION (FT./SEC.)																							
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35				
BELOW 1	1.38	209.5	264																								
1 TO 2	2.01	478.1	273																								
2 TO 5	2.37	554.6	344																								
5 TO 10	2.27	687.1	63																								
10 TO 15	2.07	693.0	57																								
15 TO 20	0.0	0.0	0																								
20 TO 25	0.0	0.0	0																								
25 TO 30	0.0	0.0	0																								
30 TO 35	0.0	0.0	0																								
ABOVE 35	0.0	0.0	0																								
TOTAL	10.91	2422.3	981																								

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	1.38	209.5	264																					
1 TO 2	2.01	478.1	273																					
2 TO 5	2.37	554.6	344																					
5 TO 10	2.27	687.1	63																					
10 TO 15	2.07	693.0	57																					
15 TO 20	2.54	934.2	36																					
20 TO 25	3.16	1254.0	41																					
25 TO 30	8.51	3683.2	83																					
30 TO 35	56.89	26047.6	158																					
ABOVE 35	96.84	42954.8	287																					
TOTAL	178.89	76088.9	1586																					



TABLE D21  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

FOR THE  
MONTH OF JULY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	4.66	1716.5	148																				
20 TO 25	6.60	2641.0	194																				
25 TO 30	8.93	3749.7	110																				
30 TO 35	11.27	4139.3	472																				
ABOVE 35	127.90	95364.7	609																				
TOTAL	232.25	133568.0	1431																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.22	154.6	230																				
1 TO 2	1.82	296.9	293																				
2 TO 5	4.46	955.4	404																				
5 TO 10	3.90	1135.7	131																				
10 TO 15	3.46	1161.6	81																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.91	389.6	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	1.27	549.6	2																				
TOTAL	16.04	4658.4	1149																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.22	154.6	230																				
1 TO 2	1.82	296.9	293																				
2 TO 5	4.46	955.4	404																				
5 TO 10	3.90	1135.7	131																				
10 TO 15	3.46	1161.6	81																				
15 TO 20	4.66	1716.5	148																				
20 TO 25	6.60	2641.0	194																				
25 TO 30	8.93	3749.7	110																				
30 TO 35	11.27	4139.3	472																				
ABOVE 35	127.17	95034.3	611																				
TOTAL	247.29	109226.4	2552																				

TABLE D22  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

FOR THE  
MONTH OF AUGUST

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	5.11	1848.2	96																				
20 TO 25	7.84	3081.4	85																				
25 TO 30	5.54	2326.9	8																				
30 TO 35	95.76	41435.9	373																				
ABOVE 35	122.66	51703.6	544																				
TOTAL	256.71	102476.0	1106																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.99	149.7	199																				
1 TO 2	2.69	434.1	321																				
2 TO 5	4.95	1077.5	427																				
5 TO 10	3.93	1012.0	262																				
10 TO 15	3.70	1226.9	93																				
15 TO 20	0.15	56.1	0																				
20 TO 25	0.50	238.4	0																				
25 TO 30	1.64	704.6	11																				
30 TO 35	0.22	92.8	0																				
ABOVE 35	1.14	490.0	6																				
TOTAL	19.47	5492.1	1259																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.99	149.7	199																				
1 TO 2	2.69	434.1	321																				
2 TO 5	4.95	1077.5	427																				
5 TO 10	3.93	1012.0	262																				
10 TO 15	3.70	1226.9	93																				
15 TO 20	5.26	1906.3	96																				
20 TO 25	8.74	3209.8	85																				
25 TO 30	7.10	3031.5	19																				
30 TO 35	95.98	41528.7	373																				
ABOVE 35	123.66	54273.6	550																				
TOTAL	256.18	107988.1	2569																				



TABLE D2a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

FOR THE  
MONTH OF SEPTEMBER

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.53	83.4	84																				
1 TO 2	1.33	223.3	101																				
2 TO 5	1.66	388.4	113																				
5 TO 10	2.00	585.5	49																				
10 TO 15	1.65	555.2	20																				
15 TO 20	0.27	95.6	3																				
20 TO 25	0.34	130.7	0																				
25 TO 30	0.37	152.2	5																				
30 TO 35	0.30	123.4	43																				
ABOVE 35	0.14	59.9	1																				
TOTAL	124.66	93714.0	452																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.53	83.4	84																				
1 TO 2	1.33	223.3	101								1	10	21	25	10	7							
2 TO 5	1.66	388.4	113								2	1	6	26	48	16	4	3	1				
5 TO 10	2.00	585.5	49								1	3	11	21	5	6	1	1					
10 TO 15	1.65	555.2	20										9	9	1	1							
15 TO 20	0.27	95.6	3											2	1								
20 TO 25	0.34	130.7	0																				
25 TO 30	0.37	152.2	5																				
30 TO 35	0.30	123.4	43										1	3	1								
ABOVE 35	0.14	59.9	1																				
TOTAL	8.65	2394.5	416							1	3	5	35	103	165	66	25	6	6	1			

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.53	83.4	84																				
1 TO 2	1.33	223.3	101																				
2 TO 5	1.66	388.4	110																				
5 TO 10	2.00	585.5	49																				
10 TO 15	1.65	555.2	20																				
15 TO 20	1.64	664.7	14																				
20 TO 25	3.30	1355.9	9																				
25 TO 30	3.27	1350.9	47																				
30 TO 35	56.00	25600.0	270																				
ABOVE 35	57.70	25232.7	155																				
TOTAL	133.31	96109.3	868																				

TABLE D2b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

FOR THE  
MONTH OF OCTOBER

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.53	83.4	84																				
1 TO 2	1.33	223.3	101																				
2 TO 5	1.66	388.4	113																				
5 TO 10	2.00	585.5	49																				
10 TO 15	1.65	555.2	20																				
15 TO 20	0.27	95.6	3																				
20 TO 25	0.34	130.7	0																				
25 TO 30	0.37	152.2	5																				
30 TO 35	0.30	123.4	43																				
ABOVE 35	0.14	59.9	1																				
TOTAL	251.29	109165.4	930																				

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.54	231.3	206							1	7	17	66	49	70	63	20	14	2	3	2		
1 TO 2	1.09	314.6	110							4	14	33	79	93	57	20	0	1	1				
2 TO 5	4.95	1620.2	325						2	6	15	26	62	123	60	23	4	3	1	1			
5 TO 10	4.42	1242.2	156							1	2	13	43	62	25	7	1	2					
10 TO 15	3.72	1223.4	61				1	1		2	3	5	17	21	5	3	2	3					
15 TO 20	0.86	310.2	0																				
20 TO 25	0.92	353.3	0																				
25 TO 30	1.12	444.9	2																				
30 TO 35	3.65	1766.6	110								2	5	32	50	11	2							
ABOVE 35	4.25	1730.8	96								1	11	21	25	0	0		4	3	1	3		
TOTAL	27.12	8467.4	1353				1	2	1	6	21	54	137	219	454	200	00	35	14	6	6		

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.54	231.3	206																				
1 TO 2	1.09	314.6	110							1	7	17	44	75	70	63	28	14	2	3	2		
2 TO 5	4.95	1622.2	320								4	14	33	79	93	57	20	8	1	1			
5 TO 10	4.42	1242.2	156						2	4	15	28	67	123	60	23	4	3	1	1			
10 TO 15	3.72	1223.4	61							1	2	13	43	62	25	7	1	2					
15 TO 20	0.86	310.2	0				1	1		2	3	3	17	21	5	3	2	3					
20 TO 25	0.92	353.3	0										1	10	12								
25 TO 30	1.12	444.9	2											8	9	1							
30 TO 35	3.65	1766.6	110											7	16								
ABOVE 35	4.25	1730.8	96						1	1	7	14	137	209	25	7	2						
TOTAL	27.41	11732.0	2603						1	1	3	2	5	103	199	94	15	7	3	1	3		
							1	2	1	3	23	63	171	600	960	272	103	36	14	6	6		



TABLE D2p  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

FOR THE  
MONTH OF NOVEMBER

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	5.56	1997.0	49																				
20 TO 25	15.35	6127.9	582																				
25 TO 30	7.10	21383.3	774																				
30 TO 35	11.3	47941.3	1343																				
ABOVE 35	157.88	68395.5	536																				
TOTAL	344.80	145795.1	3224																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	2.24	335.0	272																				
1 TO 2	3.33	527.7	366																				
2 TO 5	6.48	1417.2	463																				
5 TO 10	5.51	1502.3	160																				
10 TO 15	5.11	1608.4	50																				
15 TO 20	2.22	72.4	11																				
20 TO 25	0.72	295.0	26																				
25 TO 30	2.43	162.0	1																				
30 TO 35	3.41	1465.5	5																				
ABOVE 35	1.93	831.8	13																				
TOTAL	29.00	8378.8	1377																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	2.24	335.0	272																				
1 TO 2	3.33	527.7	366																				
2 TO 5	6.48	1417.2	463																				
5 TO 10	5.51	1502.3	160																				
10 TO 15	5.11	1608.4	50																				
15 TO 20	5.78	2369.4	60																				
20 TO 25	15.76	6403.6	528																				
25 TO 30	53.82	21946.1	777																				
30 TO 35	116.34	49406.9	1346																				
ABOVE 35	159.81	69187.3	549																				
TOTAL	373.88	154163.0	4581																				

TABLE D2q  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY

FOR ALL ROUTES COMBINED

FOR THE  
MONTH OF DECEMBER

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	3.37	1206.4	13																				
20 TO 25	5.71	2220.4	99																				
25 TO 30	3.80	12401.8	225																				
30 TO 35	37.06	16495.1	84																				
ABOVE 35	92.65	41675.7	566																				
TOTAL	169.66	74007.3	987																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.26	185.3	187																				
1 TO 2	1.74	272.7	185																				
2 TO 5	4.77	990.9	362																				
5 TO 10	3.10	1870.7	132																				
10 TO 15	3.04	1006.4	83																				
15 TO 20	0.04	15.4	1																				
20 TO 25	0.33	13.2	12																				
25 TO 30	0.25	20.6	7																				
30 TO 35	0.76	340.0	2																				
ABOVE 35	2.64	1161.3	43																				
TOTAL	18.13	9882.7	984																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.26	185.3	187																				
1 TO 2	1.74	272.7	185																				
2 TO 5	4.77	990.9	362																				
5 TO 10	3.00	1870.7	182																				
10 TO 15	3.04	1006.4	83																				
15 TO 20	3.41	1221.8	14																				
20 TO 25	5.76	2261.6	111																				
25 TO 30	38.03	12422.6	232																				
30 TO 35	37.82	16495.1	86																				
ABOVE 35	95.29	42037.0	609																				
TOTAL	187.70	70990.0	1871																				



TABLE D9a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TINER AFB, OKLAHOMA  
AND  
TRAVIS AFB, CALIFORNIA

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.67	225.0	3																				
20 TO 25	1.70	643.3	3											1	2								
25 TO 30	11.23	4037.0	10																				
30 TO 35	7.76	3433.6	111																				
ABOVE 35	5.09	2623.2	3																				
TOTAL	27.31	11759.0	132																				

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.46	65.0	55							1	1	4	0	11	13	13	2	2	1	1	1		
1 TO 2	0.53	86.5	75									4	6	15	20	15	9	2					
2 TO 5	1.44	279.5	130							1	7	15	20	54	19	12	1				1		
5 TO 10	0.71	196.6	21									2	7	16		2							
10 TO 15	0.67	209.6	6											3	2			1					
15 TO 20	2.11	35.2	0																				
20 TO 25	0.12	46.7	0																				
25 TO 30	0.17	71.6	3																				
30 TO 35	0.13	54.6	0											1	2								
ABOVE 35	0.56	251.3	27									2	7	13									
TOTAL	6.80	1298.5	320							1	2	15	33	77	119	67	21	6	1	1	2		

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.46	65.0	55							1	1	4	0	11	10	13	2	2	1	1	1		
1 TO 2	0.53	86.5	75									4	6	15	20	15	9	2					
2 TO 5	1.44	279.5	130							1	7	15	20	54	19	12	1				1		
5 TO 10	0.71	196.6	21									2	7	10		2							
10 TO 15	0.67	230.6	6										3	2			1						
15 TO 20	0.78	259.2	3										1	2									
20 TO 25	1.92	687.8	3										1	2									
25 TO 30	11.61	4089.5	13										5	5									
30 TO 35	7.69	3485.2	111			1							5	46	90	6	5	1				1	
ABOVE 35	6.62	2874.5	27										2	4	17								
TOTAL	32.19	13054.3	452			1			1	2	15	30	175	190	53	24	0	1	1	1	3		

TABLE D9b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TINER AFB, OKLAHOMA  
AND  
TRAVIS AFB, CALIFORNIA  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	6.17	58.1	0																				
20 TO 25	0.60	234.0	2																				
25 TO 30	5.69	2420.8	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	6.51	2712.9	2																				

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	25.6	3											1	1	1							
1 TO 2	0.25	39.6	6										1	1	1	3	1						
2 TO 5	0.27	58.0	7										1	1	4		1						
5 TO 10	0.14	30.7	7												3	6							
10 TO 15	0.10	57.8	2											1	1								
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.02	220.4	25										2	6	11	4	2						

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	25.6	3																				
1 TO 2	0.25	39.6	6										1	1	1								
2 TO 5	0.27	58.0	7									1	1	4	3	1							
5 TO 10	0.14	30.7	7										1	1	4								
10 TO 15	0.10	57.8	2											1	1								
15 TO 20	0.17	58.1	0																				
20 TO 25	0.60	234.0	2																				
25 TO 30	5.69	2420.8	0												2								
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	7.53	2933.3	27									2	6	13	4	2							



TABLE D3C  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TINKER AFB, OKLAHOMA  
AND  
TRAVIS AFB, CALIFORNIA  
FOR THE  
AUTUMN SEASON

NON-STORM CONDITIONS																						
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																		
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30
BELOW 1	0.	0.	0																			
1 TO 2	0.	0.	0																			
2 TO 5	0.	0.	0																			
5 TO 10	0.	0.	0																			
10 TO 15	0.	0.	0																			
15 TO 20	0.50	165.7	3										1	2								
20 TO 25	1.11	406.3	1										1									
25 TO 30	5.58	2617.1	10										4	3								
30 TO 35	7.76	3430.6	111			1						5	46	50	6	3	1				1	
ABOVE 35	5.85	2623.2	5										1	5								
TOTAL	20.80	9943.0	130			1						5	53	59	6	3	2				1	

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.28	39.3	52																				
1 TO 2	0.25	48.9	69																				
2 TO 5	1.17	220.7	131																				
5 TO 10	0.57	157.9	14																				
10 TO 15	0.48	151.9	4																				
15 TO 20	0.11	35.2	0																				
20 TO 25	0.12	46.7	0																				
25 TO 30	0.17	71.6	3																				
30 TO 35	0.13	56.6	0																				
ABOVE 35	0.56	251.3	22																				
TOTAL	3.86	1078.2	295																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.28	39.3	52																				
1 TO 2	0.25	48.9	69																				
2 TO 5	1.17	220.7	131																				
5 TO 10	0.57	157.9	14																				
10 TO 15	0.48	151.9	4																				
15 TO 20	0.11	35.2	0																				
20 TO 25	0.12	46.7	0																				
25 TO 30	0.17	71.6	3																				
30 TO 35	0.13	56.6	0																				
ABOVE 35	0.56	251.3	22																				
TOTAL	24.66	10121.0	425																				

TABLE D3D  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TINKER AFB, OKLAHOMA  
AND  
TRAVIS AFB, CALIFORNIA  
FOR THE  
MONTH OF OCTOBER

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.22	73.6	3											1	2								
20 TO 25	0.20	244.3	0																				
25 TO 30	0.42	171.0	0																				
30 TO 35	0.30	2700.1	53											1	14	13							
ABOVE 35	0.85	2623.2	5												1	4							
TOTAL	13.24	5818.2	61											1	20	19							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.6	14.1	47																				
1 TO 2	0.12	22.1	60																				
2 TO 5	0.92	170.0	128																				
5 TO 10	0.39	108.6	1																				
10 TO 15	0.34	102.5	4																				
15 TO 20	0.11	35.2	0																				
20 TO 25	0.12	46.7	0																				
25 TO 30	0.15	61.5	0																				
30 TO 35	0.13	56.6	0																				
ABOVE 35	0.56	251.3	22																				
TOTAL	2.91	860.5	267																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.06	10.1	47							1	1	6	10	9	11	1	1						
1 TO 2	0.12	20.1	60									6	12	23	12	5	2						
2 TO 5	0.92	170.0	128								1	7	16	27	47	19	11	1					
5 TO 10	0.39	108.6	1																				
10 TO 15	0.34	102.5	4																				
15 TO 20	0.33	100.0	3																				
20 TO 25	0.02	295.9	0																				
25 TO 30	0.57	233.3	0																				
30 TO 35	0.19	2754.7	33										1	18	13								
ABOVE 35	0.42	2874.5	27										2	8	17								
TOTAL	16.17	6678.5	303								1	2	15	27	79	112	60	10	5	1	1	2	



TABLE D34  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TINIER AFB, OKLAHOMA  
AND  
TRAVIS AFB, CALIFORNIA  
FOR THE  
MONTH OF NOVEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0	0	0																				
1 TO 2	0.22	29.2	5																				
2 TO 5	0.13	20.9	9																				
5 TO 10	0.25	50.7	3																				
10 TO 15	0.17	49.3	13																				
15 TO 20	0.15	49.4	0																				
20 TO 25	0.41	157.0	1																				
25 TO 30	0.19	229.5	19																				
30 TO 35	1.09	732.5	70																				
ABOVE 35	0	0	0																				
TOTAL	7.94	3229.0	89																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	29.2	5																				
1 TO 2	0.13	20.9	9																				
2 TO 5	0.25	50.7	3																				
5 TO 10	0.17	49.3	13																				
10 TO 15	0.15	49.4	0																				
15 TO 20	0	0	0																				
20 TO 25	0	0	0																				
25 TO 30	0.22	50.1	3																				
30 TO 35	0	0	0																				
ABOVE 35	0	0	0																				
TOTAL	0.94	217.5	33																				

STORM PLUS NON-STORM

ALTITUDE 1000 - 1	TIME 1 HOUR	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	29.2	5																				
1 TO 2	0.13	20.9	9																				
2 TO 5	0.25	50.7	3																				
5 TO 10	0.17	49.3	13																				
10 TO 15	0.15	49.4	0																				
15 TO 20	0.22	50.1	0																				
20 TO 25	0.41	157.0	1																				
25 TO 30	0.19	229.5	13																				
30 TO 35	0.19	229.5	70																				
ABOVE 35	0	0	0																				
TOTAL	8.40	3442.6	122																				

TABLE D35  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TINIER AFB, OKLAHOMA  
AND  
TRAVIS AFB, CALIFORNIA  
FOR THE  
MONTH OF DECEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0	0	0																				
1 TO 2	0	0	0																				
2 TO 5	0	0	0																				
5 TO 10	0	0	0																				
10 TO 15	0	0	0																				
15 TO 20	0.17	50.1	0																				
20 TO 25	0.60	234.0	2																				
25 TO 30	0.65	240.0	0																				
30 TO 35	0	0	0																				
ABOVE 35	0	0	0																				
TOTAL	0.91	2712.9	2																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	25.6	3																				
1 TO 2	0.25	50.6	6																				
2 TO 5	0.27	50.8	7																				
5 TO 10	0.16	30.7	7																				
10 TO 15	0.10	27.0	2																				
15 TO 20	0	0	0																				
20 TO 25	0	0	0																				
25 TO 30	0	0	0																				
30 TO 35	0	0	0																				
ABOVE 35	0	0	0																				
TOTAL	1.02	220.4	25																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	25.6	3																				
1 TO 2	0.25	50.6	6																				
2 TO 5	0.27	50.8	7																				
5 TO 10	0.16	30.7	7																				
10 TO 15	0.10	27.0	2																				
15 TO 20	0.17	50.1	0																				
20 TO 25	0.60	234.0	2																				
25 TO 30	0.65	240.0	0																				
30 TO 35	0	0	0																				
ABOVE 35	0	0	0																				
TOTAL	7.53	2093.3	27																				



TABLE D4a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
RELLY AFB, TEXAS

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDF DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.45	163.7	1																				
20 TO 25	2.94	1276.2	42																				
25 TO 30	0.93	309.2	3																				
30 TO 35	9.25	4075.0	1																				
ABOVE 35	7.67	3532.3	4																				
TOTAL	21.25	9446.3	50																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.13	19.3	10																				
1 TO 2	0.36	54.0	60																				
2 TO 5	1.74	215.9	62																				
5 TO 10	0.56	166.8	20																				
10 TO 15	0.53	176.5	21																				
15 TO 20	0.55	17.0	1																				
20 TO 25	0.51	210.9	12																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	3.18	873.2	185																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.13	19.3	10							1													
1 TO 2	0.36	54.0	60									2	9	11	20	9							
2 TO 5	1.74	215.9	62									1	0	10	26	10	9	1					
5 TO 10	0.56	166.8	20								1	1	3	11	1								
10 TO 15	0.53	176.5	21									4	3	10	1	2							
15 TO 20	0.55	181.5	1											1									
20 TO 25	0.45	1695.0	54											11	39	9	1						
25 TO 30	0.93	309.2	3																				
30 TO 35	9.25	4075.0	1											1	2								
ABOVE 35	7.67	3532.3	4											2	2								
TOTAL	24.43	10315.4	235							1	2	4	22	45	114	25	14	2	4	2			

TABLE D4b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
RELLY AFB, TEXAS  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.20	72.2	1																				
20 TO 25	0.24	96.9	0																				
25 TO 30	0.26	107.1	0																				
30 TO 35	1.76	313.5	1																				
ABOVE 35	7.67	3532.3	4																				
TOTAL	10.12	4619.6	6																				

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.32	2.5	0																				
1 TO 2	0.19	14.6	14										4	6		3							
2 TO 5	0.56	153.6	26							1	1		0	2	7	4	3	1			1		
5 TO 10	0.26	75.7	7								1	1	1			1			2				
10 TO 15	0.19	64.1	1												1								
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.13	257.5	48							1	1	1	0	7	14	5	6	1	2	2			

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.32	2.5	0																				
1 TO 2	0.10	14.6	14										4	6		5							
2 TO 5	0.56	100.6	26							1	1		6	2	7	4	3	1		1			
5 TO 10	0.26	75.7	7								1	1	1			1			2				
10 TO 15	0.19	64.1	1																				
15 TO 20	0.20	72.2	1													1							
20 TO 25	0.24	94.9	0																				
25 TO 30	0.26	137.1	0																				
30 TO 35	1.76	313.5	1																				
ABOVE 35	7.67	3532.3	4										1										
TOTAL	11.26	4876.9	54							1	1	1	8	10	17	5	6	1	2	2			



### NON-STORM CONDITIONS

### STORM CONDITIONS

**STORM PLUS NON-STORM**

#### POST-STORM CONDITIONS

### STORM CONDITIONS

STORM PLUS NEW-STORM

306



TABLE D66  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
KELLY AFB, TEXAS  
FOR THE  
MONTH OF MARCH

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																							
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35				
BELOW 1	0.	0.	0																								
1 TO 2	0.	0.	0																								
2 TO 5	0.	0.	0																								
5 TO 10	0.	0.	0																								
10 TO 15	0.	0.	0																								
15 TO 20	6.20	72.2	1																								
20 TO 25	6.24	94.3	0																								
25 TO 30	0.26	107.1	0																								
30 TO 35	1.76	813.5	1																								
ABOVE 35	7.67	3532.3	4																								
TOTAL	10.12	4619.4	6																								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.32	2.5	0																				
1 TO 2	0.12	14.6	14											4	6	3							
2 TO 5	0.26	13.4	26										6	2	7	4	3	1			1		
5 TO 10	0.26	75.7	7									1	1	1		1			2		1		
10 TO 15	0.19	64.1	1												1								
15 TO 20	0.22	3.0	0																				
20 TO 25	0.22	3.0	0																				
25 TO 30	0.26	3.0	0																				
30 TO 35	0.26	3.0	0																				
ABOVE 35	0.26	3.0	0																				
TOTAL	1.13	257.5	40									1	1	1	8	7	14	5	6	1	2	2	

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	2.5	0																				
1 TO 2	0.12	14.6	14										1	4	6		3						
2 TO 5	0.26	10.4	26									6	2	7		4	3	1					
5 TO 10	0.26	75.7	7								1	1	1		1				2		1		
10 TO 15	0.19	64.1	1												1								
15 TO 20	0.22	72.2	1																				
20 TO 25	0.24	94.3	0												1								
25 TO 30	0.26	107.1	0																				
30 TO 35	1.76	813.5	1											1									
ABOVE 35	7.67	3532.3	4											2	2								
TOTAL	11.26	4676.9	54									1	1	1	8	10	17	5	6	1	2	2	

TABLE D67  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
KELLY AFB, TEXAS  
FOR THE  
MONTH OF JULY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	3.0	0																				
1 TO 2	0.22	3.0	0																				
2 TO 5	0.22	3.0	0																				
5 TO 10	0.22	3.0	0																				
10 TO 15	0.22	3.0	0																				
15 TO 20	0.17	62.4	0																				
20 TO 25	0.17	67.4	0																				
25 TO 30	0.19	78.7	0																				
30 TO 35	5.36	2336.7	2																				
ABOVE 35	0.22	3.0	0																				
TOTAL	5.92	2543.2	2																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.20	13.3	6																				
1 TO 2	0.12	20.6	6																				
2 TO 5	0.25	55.3	1																				
5 TO 10	0.25	58.4	0																				
10 TO 15	0.21	60.3	0																				
15 TO 20	0.22	3.0	0																				
20 TO 25	0.22	3.0	0																				
25 TO 30	0.22	3.0	0																				
30 TO 35	0.22	3.0	0																				
ABOVE 35	0.22	3.0	0																				
TOTAL	0.87	215.7	13																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.09	13.3	6										5	5									
1 TO 2	0.12	23.6	6										3	2			1						
2 TO 5	0.25	55.3	1																				
5 TO 10	0.20	58.4	0																				
10 TO 15	0.21	60.0	0																				
15 TO 20	0.17	62.4	0																				
20 TO 25	0.17	67.4	0																				
25 TO 30	0.19	78.7	0																				
30 TO 35	5.36	2336.7	2																				
ABOVE 35	0.	0.	0																				
TOTAL	6.77	2750.0	15										6	8		1							



TABLE D4  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
KFLY AFB, TEXAS  
FOR THE  
MONTH OF NOVEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	3.	0																				
1 TO 2	0.	3.	0																				
2 TO 5	0.	3.	0																				
5 TO 10	0.	3.	0																				
10 TO 15	0.	3.	0																				
15 TO 20	0.07	29.1	0																				
20 TO 25	2.33	1114.4	42											9	30	2	1						
25 TO 30	0.40	213.4	0																				
30 TO 35	2.13	926.8	0																				
ABOVE 35	0.	0.	0																				
TOTAL	5.22	2293.7	42											9	30	2	1						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	3.5	4																				
1 TO 2	0.13	19.7	40																				
2 TO 5	0.23	60.0	35																				
5 TO 10	0.10	32.7	13																				
10 TO 15	0.13	44.4	20																				
15 TO 20	0.35	17.0	0																				
20 TO 25	0.51	210.9	12																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.14	366.9	124																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	3.5	4																				
1 TO 2	0.13	19.7	43																				
2 TO 5	0.23	60.0	35																				
5 TO 10	0.10	32.7	13																				
10 TO 15	0.13	44.4	20																				
15 TO 20	0.12	47.0	0																				
20 TO 25	3.04	1393.3	54																				
25 TO 30	0.40	213.4	0																				
30 TO 35	2.13	926.8	0																				
ABOVE 35	0.	0.	0																				
TOTAL	6.40	2660.7	166																				



TABLE D9a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
DOVER AFB, DELAWARE

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.33	495.0	11												2	7	2						
20 TO 25	2.23	903.6	15										3	4	7		1						
25 TO 30	0.07	367.9	14												7	7							
30 TO 35	0.50	3649.1	12												4	0							
ABOVE 35	23.46	10391.7	5												4	4							
TOTAL	26.19	15004.3	60										3	21	33	2	1						

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT.)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.31	45.3	61							1	2	0	0	19	10	2							
1 TO 2	0.62	105.4	76								2	13	23	23	13	9							
2 TO 5	1.42	297.1	27										7	16	4								
5 TO 10	0.74	213.5	12										3	0	1								
10 TO 15	0.53	176.1	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.02	7.2	11																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	3.63	844.6	107							1	4	22	44	70	30	7							

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT.)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.31	45.3	61							1			0	1	1	0		1					
1 TO 2	0.62	105.4	76								2	13	20	23	13	5							
2 TO 5	1.42	297.1	27										7	10	4								
5 TO 10	0.74	213.5	12										3	8	1								
10 TO 15	0.53	176.1	0																				
15 TO 20	1.33	495.0	11										2	7	2								
20 TO 25	2.23	900.6	15									3	4	7									
25 TO 30	0.09	375.1	25									1	12	11	1								
30 TO 35	0.50	3649.1	12																				
ABOVE 35	23.46	10391.7	5										4										
TOTAL	30.32	16648.0	247							1	4	25	65	103	40	8			1				

TABLE D9b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
DOVER AFB, DELAWARE  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.33	391.0	3																				
20 TO 25	1.75	700.2	14																				
25 TO 30	0.47	190.0	10																				
30 TO 35	0.67	200.5	12																				
ABOVE 35	21.12	9365.2	8																				
TOTAL	25.66	12995.9	47																				

STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	22.2	20																				
1 TO 2	0.30	60.0	43																				
2 TO 5	0.70	100.0	10																				
5 TO 10	0.34	101.4	10																				
10 TO 15	0.20	60.2	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.02	7.2	11																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.09	432.9	111																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	22.2	20																				
1 TO 2	0.30	60.0	43																				
2 TO 5	0.70	100.0	10									1	0	11	15	5	2						
5 TO 10	0.34	101.4	10											3	6	1							
10 TO 15	0.20	60.2	0																				
15 TO 20	1.30	391.0	3											1	2								
20 TO 25	1.75	700.2	14									3	6	6				1					
25 TO 30	0.40	200.0	21									1	10	0									
30 TO 35	0.67	200.5	12											6	0								
ABOVE 35	21.12	9365.2	8												4								
TOTAL	26.09	13406.3	100								2	10	47	71	15	4							



TABLE D5c  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
DOVER AFB, DELAWARE  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS																						
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																		
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30
BELOW 1	0.	0.	0																			
1 TO 2	0.	0.	0																			
2 TO 5	0.	0.	0																			
5 TO 10	0.	0.	0																			
10 TO 15	0.	0.	0																			
15 TO 20	0.30	30.1	0																			
20 TO 25	0.13	94.1	0																			
25 TO 30	0.08	35.7	0																			
30 TO 35	2.44	1647.7	0																			
ABOVE 35	2.17	954.0	0																			
TOTAL	4.90	2121.7	0																			

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.24	6.5	26									2	4	9	13	1							
1 TO 2	0.25	8.3	15									2	4	6	2	1							
2 TO 5	0.10	43.5	0																				
5 TO 10	0.37	23.7	0																				
10 TO 15	0.07	23.6	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.42	102.6	41									4	8	15	12	2							

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.04	6.5	26									2	4	9	10	1							
1 TO 2	0.25	8.3	15									2	4	6	2	1							
2 TO 5	0.10	43.5	0																				
5 TO 10	0.37	23.7	0																				
10 TO 15	0.07	23.6	0																				
15 TO 20	0.30	30.1	0																				
20 TO 25	0.13	94.1	0																				
25 TO 30	0.08	35.7	0																				
30 TO 35	2.44	1647.7	0																				
ABOVE 35	2.17	954.0	0																				
TOTAL	5.32	2224.3	41									4	8	15	12	2							

TABLE D5d  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
DOVER AFB, DELAWARE  
FOR THE  
AUTUMN SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.20	73.0	0											1	5	2							
20 TO 25	0.35	137.3	1											1									
25 TO 30	0.32	133.4	4											2	2								
30 TO 35	5.39	2312.9	0																				
ABOVE 35	0.17	72.5	0																				
TOTAL	6.42	2729.1	15											5	8	2							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	16.7	0							1				2	1								
1 TO 2	0.10	27.2	10								1	2	5	2	6			1					
2 TO 5	0.55	97.5	9										2	3	4								
5 TO 10	0.33	91.4	2													2							
10 TO 15	0.17	96.4	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.32	289.2	35							1	2	2	7	9	11	2			1				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
BELOW 1	0.12	16.7	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
1 TO 2	0.10	27.2	10							1	1	2	5	2	6		2						
2 TO 5	0.55	97.5	9										2	3	4								
5 TO 10	0.33	91.4	2											2									
10 TO 15	0.17	96.4	0																				
15 TO 20	0.20	73.0	0										1	5	2								
20 TO 25	0.35	137.3	1											1									
25 TO 30	0.32	133.4	4																				
30 TO 35	5.39	2312.9	0											2	2								
ABOVE 35	0.17	72.5	0																				
TOTAL	7.75	3010.3	40							1	2	2	10	17	13	2		1					



TABLE D5a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
DOVER AFB, DELAWARE  
FOR THE  
MONTH OF JANUARY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.95	356.2	3											1	2								
20 TO 25	1.65	669.6	14									3	4	4		1							
25 TO 30	3.34	133.2	10										5	5									
30 TO 35	0.3	230.7	12											4	4								
ABOVE 35	15.61	6082.9	5											3	2								
TOTAL	19.10	8292.7	44										3	17	23		1						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	15.9	29											1	6	5	8	8	1				
1 TO 2	0.28	50.3	41										1	8	11	14	5	2					
2 TO 5	0.60	129.5	17												4	13							
5 TO 10	0.21	61.3	4												3	1							
10 TO 15	0.20	65.1	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.32	7.2	11											1	5	4	1						
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.61	329.3	102											2	15	24	40	14	3				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAK	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	15.9	29																				
1 TO 2	0.20	50.3	41									1	6	5	8	8	1						
2 TO 5	0.60	129.5	17										0	11	14	5	2						
5 TO 10	0.21	61.3	4											3	1								
10 TO 15	0.20	65.1	0																				
15 TO 20	0.95	356.2	3											1	2								
20 TO 25	1.65	669.6	14									3	4	4			1						
25 TO 30	0.38	162.4	21									1	10	9		1							
30 TO 35	0.53	230.7	12											4	8								
ABOVE 35	15.61	6082.9	5											3	2								
TOTAL	20.51	8621.9	146									2	18	45	63	14	4						

TABLE D5f  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
DOVER AFB, DELAWARE  
FOR THE  
MONTH OF FEBRUARY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.10	35.6	0																				
20 TO 25	0.16	39.6	0																				
25 TO 30	0.11	45.6	0																				
30 TO 35	0.13	57.7	0																				
ABOVE 35	5.52	2482.2	3											1	2								
TOTAL	5.96	2669.8	3											1	2								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.04	6.2	0																				
1 TO 2	0.11	19.5	2									1		1									
2 TO 5	0.11	26.6	1										1										
5 TO 10	0.13	40.1	6																				
10 TO 15	0.09	31.1	0												5	1							
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.48	123.6	9									1	1	6	1								

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.04	6.2	0																				
1 TO 2	0.11	19.5	2									1		1									
2 TO 5	0.11	26.6	1										1										
5 TO 10	0.13	40.1	6												5	1							
10 TO 15	0.09	31.1	0																				
15 TO 20	0.10	35.6	0																				
20 TO 25	0.10	39.6	0																				
25 TO 30	0.11	45.6	0																				
30 TO 35	0.13	57.7	0																				
ABOVE 35	5.52	2482.2	3											1	2								
TOTAL	6.66	2784.4	12									1	2	8	1								



TABLE D9b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
DOVER AFB, DELAWARE  
FOR THE  
MONTH OF MAY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.08	30.1	0																				
20 TO 25	0.13	54.1	0																				
25 TO 30	0.08	35.7	0																				
30 TO 35	2.44	1247.7	0																				
ABOVE 35	2.17	954.0	0																				
TOTAL	4.00	2121.7	0																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.04	6.5	26																				
1 TO 2	0.05	8.3	15																				
2 TO 5	0.18	43.5	0																				
5 TO 10	0.07	23.7	0																				
10 TO 15	0.07	23.6	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.42	102.6	41									4	8	15	12	2							

4 8 15 12 2

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.04	6.5	26																				
1 TO 2	0.05	8.3	15																				
2 TO 5	0.18	43.5	0																				
5 TO 10	0.07	23.7	0																				
10 TO 15	0.07	23.6	0																				
15 TO 20	0.08	30.1	0																				
20 TO 25	0.13	54.1	0																				
25 TO 30	0.08	35.7	0																				
30 TO 35	2.44	1247.7	0																				
ABOVE 35	2.17	954.0	0																				
TOTAL	5.32	2224.3	41																				

4 8 15 12 2

TABLE D9b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
DOVER AFB, DELAWARE  
FOR THE  
MONTH OF NOVEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.20	73.0	8											1	9	2							
20 TO 25	0.35	137.3	1												1								
25 TO 30	0.32	133.4	4											2	2								
30 TO 35	5.39	2312.9	0																				
ABOVE 35	0.17	72.9	0																				
TOTAL	6.42	2729.1	13																				

1 5 2

2 2

1 5 2

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	16.7	6																				
1 TO 2	0.10	27.2	10							1													
2 TO 5	0.33	97.5	9								1	2	5	2	6	2							
5 TO 10	0.33	91.4	2										2	3	4								
10 TO 15	0.17	56.4	0											2									
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.32	269.2	15								1	2	2	7	9	11	2		1				

1 2 2 7 9 11 2 1

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	16.7	6							1				2	1								
1 TO 2	0.10	27.2	10								1	2	5	2	4	2							
2 TO 5	0.33	97.5	9										2	3	4								
5 TO 10	0.33	91.4	2											2									
10 TO 15	0.17	56.4	0																				
15 TO 20	0.20	73.0	8										1	5	2								
20 TO 25	0.35	137.3	1											1									
25 TO 30	0.32	133.4	4											2	2								
30 TO 35	5.39	2312.9	0																				
ABOVE 35	0.17	72.9	0																				
TOTAL	7.75	3010.3	40							1	2	2	10	17	13	2		1					

1 2 2 10 17 13 2 1



TABLE D6a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
CHARLESTON AFB/MUNI, SOUTH CAROLINA

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.35	128.9	0																				
20 TO 25	0.32	130.6	0																				
25 TO 30	3.04	1289.2	17																				
30 TO 35	1.24	526.7	129																				
ABOVE 35	14.53	6585.0	14																				
TOTAL	19.90	8656.4	160																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	26.4	32																				
1 TO 2	0.31	56.1	21																				
2 TO 5	0.74	181.5	35																				
5 TO 10	0.42	134.3	10																				
10 TO 15	0.35	121.7	5																				
15 TO 20	0.05	18.5	0																				
20 TO 25	0.03	13.1	1																				
25 TO 30	0.06	23.6	30																				
30 TO 35	0.81	113.5	231																				
ABOVE 35	0.	0.	0																				
TOTAL	2.97	888.7	373																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	26.4	32																				
1 TO 2	0.31	56.1	21																				
2 TO 5	0.74	181.5	35																				
5 TO 10	0.42	134.3	10																				
10 TO 15	0.35	121.7	5																				
15 TO 20	0.40	147.4	0																				
20 TO 25	0.34	143.7	1																				
25 TO 30	1.10	1308.8	55																				
30 TO 35	2.07	840.2	360																				
ABOVE 35	14.53	6585.0	14																				
TOTAL	22.47	9544.1	533																				

TABLE D6b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
CHARLESTON AFB/MUNI, SOUTH CAROLINA  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.08	31.2	0																				
20 TO 25	0.10	40.3	0																				
25 TO 30	2.72	1151.7	17																				
30 TO 35	0.83	341.9	129							1		6	39	40	11	10	1		1				
ABOVE 35	0.56	291.7	1											1									
TOTAL	4.38	1816.7	147							1		6	44	73	11	10	1		1				

STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.09	13.4	11																				
1 TO 2	0.13	28.0	0																				
2 TO 5	0.15	43.0	6																				
5 TO 10	0.09	26.8	5																				
10 TO 15	0.12	41.6	5																				
15 TO 20	0.05	18.5	0																				
20 TO 25	0.03	13.1	1																				
25 TO 30	0.04	23.6	30																				
30 TO 35	0.81	113.5	231																				
ABOVE 35	0.	0.	0																				
TOTAL	1.54	521.7	297																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.09	13.4	11									1	1	1	5	1	2						
1 TO 2	0.13	28.0	0																				
2 TO 5	0.15	43.0	6												3	3							
5 TO 10	0.09	26.8	5													5							
10 TO 15	0.12	41.6	5													4	1						
15 TO 20	0.13	49.7	0																				
20 TO 25	0.13	93.4	1																				
25 TO 30	2.70	1179.3	55								1	4	1	23	20	3	3	1					
30 TO 35	1.64	655.4	360					1	1	2	2	11	102	100	34	14	9	2					
ABOVE 35	0.56	291.7	1										1										
TOTAL	9.83	2896.4	644					1	1	2	4	16	135	822	80	10	4	2					



TABLE D6c  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
CHARLESTON AFB/MUNI, SOUTH CAROLINA  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS																							
ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT.)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.27	97.7	0																				
20 TO 25	0.27	92.4	0																				
25 TO 30	0.32	133.6	0																				
30 TO 35	0.42	186.8	0																				
ABOVE 35	13.97	6333.3	13																				
TOTAL	15.20	6839.7	13											2	11								

STORM CONDITIONS																							
ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT.)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.29	12.8	21																				
1 TO 2	0.19	28.1	21																				
2 TO 5	0.50	130.5	29																				
5 TO 10	0.34	107.5	9																				
10 TO 15	0.23	80.1	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.44	367.0	70											4	14	17	14	16	9	1			

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.29	12.8	21									1	4	2	1	0	4	1					
1 TO 2	0.19	28.1	21									2	5	2	1	7	5						
2 TO 5	0.50	130.5	29									1	5	12	10	1							
5 TO 10	0.34	107.5	9											1	4								
10 TO 15	0.23	80.1	0																				
15 TO 20	0.27	97.7	0																				
20 TO 25	0.22	92.4	0																				
25 TO 30	0.32	133.6	0																				
30 TO 35	0.42	186.8	0																				
ABOVE 35	13.97	6333.3	13											2	11								
TOTAL	16.64	7206.7	80									4	14	19	26	16	9	1					

TABLE D6d  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
CHARLESTON AFB/MUNI, SOUTH CAROLINA  
FOR THE  
MONTH OF JANUARY

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.3	12.2	0																				
20 TO 25	0.33	13.1	0																				
25 TO 30	0.35	20.9	0																				
30 TO 35	0.35	16.6	0																				
ABOVE 35	0.56	251.7	1											1									
TOTAL	0.71	312.5	1											1									

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	5.5	7																				
1 TO 2	0.33	4	0																				
2 TO 5	0.37	19.7	2																				
5 TO 10	0.22	7.9	0																				
10 TO 15	0.02	6.4	1																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.17	48.0	10											1	1	4	3	1					

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	5.5	7																				
1 TO 2	0.33	6.4	0									1	1	1	3		1						
2 TO 5	0.37	19.7	2											2									
5 TO 10	0.22	7.9	0																				
10 TO 15	0.22	6.4	1											1									
15 TO 20	0.33	13.2	0																				
20 TO 25	0.33	13.1	0																				
25 TO 30	0.35	20.9	0																				
30 TO 35	0.35	16.6	0																				
ABOVE 35	0.56	251.7	1											1									
TOTAL	0.88	360.5	11									1	1	5	3		1						



TABLE D66  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
CHARLESTON AFB/MUNI, SOUTH CAROLINA  
FOR THE  
MONTH OF FEBRUARY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
BELOW 1	0.	0.	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.	0.	0													
2 TO 5	0.	0.	0													
5 TO 10	0.	0.	0													
10 TO 15	0.	0.	0													
15 TO 20	0.09	18.9	0													
20 TO 25	0.07	27.2	0													
25 TO 30	2.67	1130.7	17													
30 TO 35	0.00	327.5	129													
ABOVE 35	0.	0.	0													
TOTAL	3.89	1894.3	146													

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
BELOW 1	0.07	10.1	4	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.15	19.6	0													
2 TO 5	0.08	23.3	4													
5 TO 10	0.06	19.0	5													
10 TO 15	0.10	33.2	4													
15 TO 20	0.05	18.9	0													
20 TO 25	0.33	13.1	1													
25 TO 30	0.06	23.6	38													
30 TO 35	0.91	313.5	231													
ABOVE 35	0.	0.	0													
TOTAL	1.37	471.8	287													

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
BELOW 1	0.07	10.1	4	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.15	19.6	0													
2 TO 5	0.08	23.3	4													
5 TO 10	0.06	19.0	5													
10 TO 15	0.10	33.2	4													
15 TO 20	0.10	37.4	1													
20 TO 25	0.10	45.3	1													
25 TO 30	2.73	1154.3	55													
30 TO 35	1.01	641.0	160													
ABOVE 35	0.	0.	0													
TOTAL	4.96	1978.1	433													

TABLE D67  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
CHARLESTON AFB/MUNI, SOUTH CAROLINA  
FOR THE  
MONTH OF JULY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
BELOW 1	0.	0.	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.	0.	0													
2 TO 5	0.	0.	0													
5 TO 10	0.	0.	0													
10 TO 15	0.	0.	0													
15 TO 20	0.10	38.1	0													
20 TO 25	0.38	32.9	0													
25 TO 30	0.13	55.8	0													
30 TO 35	0.25	107.9	0													
ABOVE 35	4.33	1908.2	0													
TOTAL	4.90	2143.8	0													

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
BELOW 1	0.34	5.4	17	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.06	9.0	19													
2 TO 5	0.19	46.4	17													
5 TO 10	0.10	33.8	1													
10 TO 15	0.09	31.1	0													
15 TO 20	0.	0.	0													
20 TO 25	0.	0.	0													
25 TO 30	0.	0.	0													
30 TO 35	0.	0.	0													
ABOVE 35	0.	0.	0													
TOTAL	0.49	125.7	54													

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
BELOW 1	0.34	5.4	17	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.06	9.0	19													
2 TO 5	0.19	46.4	17													
5 TO 10	0.10	33.8	1													
10 TO 15	0.09	31.1	0													
15 TO 20	0.10	36.1	0													
20 TO 25	0.38	32.9	0													
25 TO 30	0.13	55.8	0													
30 TO 35	0.25	107.9	0													
ABOVE 35	4.33	1908.2	0													
TOTAL	5.39	2266.5	54													



TABLE D6  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
CHARLESTON AFB/MJRT, SOUTH CAROLINA  
FOR THE  
MONTH OF AUGUST

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.17	61.6	0																				
20 TO 25	0.14	57.5	0																				
25 TO 30	0.18	77.0	0																				
30 TO 35	0.17	76.9	0																				
ABOVE 35	9.63	4425.1	13											2	11								
TOTAL	10.30	4690.9	13											2	11								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	7.9	4								2					1	1						
1 TO 2	0.12	19.1	2								1					1							
2 TO 5	0.40	92.1	12								1	1	7	3									
5 TO 10	0.23	75.7	4											4									
10 TO 15	0.14	49.0	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.95	241.3	22								1	4	7	7	2	1							

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	7.9	4								2					1	1						
1 TO 2	0.12	19.1	2								1					1							
2 TO 5	0.40	92.1	12								1	1	7	3									
5 TO 10	0.23	75.7	4											4									
10 TO 15	0.14	49.0	0																				
15 TO 20	0.17	61.6	0																				
20 TO 25	0.14	57.5	0																				
25 TO 30	0.18	77.0	0																				
30 TO 35	0.17	76.9	0																				
ABOVE 35	9.63	4425.1	13										2	11									
TOTAL	11.25	4940.2	26								1	4	9	10	2	1							



TABLE D7a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
MC GUIRE AFB, NEW JERSEY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (KTS./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.00	0.0	0																					
1 TO 2	0.00	0.0	0																					
2 TO 5	0.00	0.0	0																					
5 TO 10	0.00	0.0	0																					
10 TO 15	0.00	0.0	0																					
15 TO 20	0.31	112.2	0																					
20 TO 25	0.28	108.8	0																					
25 TO 30	0.36	133.3	0																					
30 TO 35	7.32	1005.1	178																					
ABOVE 35	12.12	4481.8	16																					
TOTAL	18.08	7838.2	194																					

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	32.6	63								1	2	10	15	13	10	7	1	2				
1 TO 2	0.23	32.9	51								1	3	18	18	19	9	7						
2 TO 5	0.67	157.7	142								1	7	15	26	66	19	0	3					
5 TO 10	0.44	135.5	0																				
10 TO 15	0.39	131.6	0																				
15 TO 20	0.09	19.2	0																				
20 TO 25	0.09	20.1	0																				
25 TO 30	0.73	323.0	5													3	2						
30 TO 35	0.33	15.6	0																				
ABOVE 35	2.78	1295.3	0																				
TOTAL	5.57	2163.5	261								2	10	28	62	100	38	13	6	7				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	32.6	63							1	2	10	15	13	10	7	1	2					
1 TO 2	0.23	32.9	51							1	5	18	19	9	1								
2 TO 5	0.67	157.7	142							1	7	15	26	66	19	5	1						
5 TO 10	0.44	135.5	0																				
10 TO 15	0.39	131.6	0																				
15 TO 20	0.16	131.4	0																				
20 TO 25	0.33	128.9	0																				
25 TO 30	1.09	673.3	5										3	2									
30 TO 35	7.35	1020.7	178						1	2	11	49	83	14	7	3	1	2	1				
ABOVE 35	12.90	5757.1	16										5	10	1								
TOTAL	23.66	10001.6	455						1	2	12	99	116	193	57	20	9	3	2	1			

TABLE D7b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
MC GUIRE AFB, NEW JERSEY  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																							
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35				
BELOW 1	0.00	0.0	0																								
1 TO 2	0.00	0.0	0																								
2 TO 5	0.00	0.0	0																								
5 TO 10	0.00	0.0	0																								
10 TO 15	0.00	0.0	0																								
15 TO 20	0.19	68.7	0																								
20 TO 25	0.18	69.1	0																								
25 TO 30	0.25	134.5	0																								
30 TO 35	1.81	781.2	124																								
ABOVE 35	11.12	4481.8	16																								
TOTAL	12.55	5485.2	140																								

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.16	23.4	24																				
1 TO 2	0.12	19.1	11																				
2 TO 5	0.42	94.7	89																				
5 TO 10	0.35	109.7	0																				
10 TO 15	0.28	93.0	0																				
15 TO 20	0.05	19.2	0																				
20 TO 25	0.05	20.1	0																				
25 TO 30	0.73	323.0	5																				
30 TO 35	0.33	15.6	0																				
ABOVE 35	2.78	1295.3	0																				
TOTAL	4.98	2009.8	129																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.16	23.4	24																				
1 TO 2	0.12	19.1	11																				
2 TO 5	0.42	94.7	89																				
5 TO 10	0.35	109.7	0																				
10 TO 15	0.28	93.0	0																				
15 TO 20	0.24	87.9	0																				
20 TO 25	0.23	88.2	0																				
25 TO 30	0.99	627.4	5																				
30 TO 35	1.84	796.8	124																				
ABOVE 35	12.90	5757.1	16																				
TOTAL	17.55	7495.1	269																				



TABLE D76  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA

AND  
MCGUIRE AFB, NEW JERSEY  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.0	0.0	0													
1 TO 2	0.0	0.0	0													
2 TO 5	0.0	0.0	0													
5 TO 10	0.0	0.0	0													
10 TO 15	0.0	0.0	0													
15 TO 20	0.12	43.5	0													
20 TO 25	0.10	39.7	0													
25 TO 30	0.11	45.0	0													
30 TO 35	5.21	2223.9	94											10	36	
ABOVE 35	0.0	0.0	0													
TOTAL	5.53	2392.9	94											10	36	

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.00	0.2	39													
1 TO 2	0.00	13.9	40													
2 TO 5	0.25	83.0	99													
5 TO 10	0.09	29.8	0													
10 TO 15	0.11	37.0	0													
15 TO 20	0.0	0.0	0													
20 TO 25	0.0	0.0	0													
25 TO 30	0.0	0.0	0													
30 TO 35	0.0	0.0	0													
ABOVE 35	0.0	0.0	0													
TOTAL	0.60	193.6	192											1	9	14

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.00	0.2	39													
1 TO 2	0.00	13.9	40													
2 TO 5	0.25	83.0	99													
5 TO 10	0.09	29.8	0													
10 TO 15	0.11	37.0	0													
15 TO 20	0.12	43.5	0													
20 TO 25	0.10	39.7	0													
25 TO 30	0.11	45.0	0													
30 TO 35	5.21	2223.9	94											10	36	
ABOVE 35	0.0	0.0	0													
TOTAL	6.13	2526.6	106											1	9	14

TABLE D76  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA

AND  
MCGUIRE AFB, NEW JERSEY  
FOR THE  
MONTH OF JANUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.0	0.0	0													
1 TO 2	0.0	0.0	0													
2 TO 5	0.0	0.0	0													
5 TO 10	0.0	0.0	0													
10 TO 15	0.0	0.0	0													
15 TO 20	0.0	0.0	0													
20 TO 25	0.0	0.0	0													
25 TO 30	0.0	0.0	0													
30 TO 35	0.0	0.0	0													
ABOVE 35	1.07	445.9	3													
TOTAL	1.07	445.9	3													

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.02	3.0	0													
1 TO 2	0.02	16.9	3													
2 TO 5	0.09	19.4	4													
5 TO 10	0.11	33.6	0													
10 TO 15	0.12	43.4	0													
15 TO 20	0.05	19.2	0													
20 TO 25	0.05	20.1	0													
25 TO 30	0.03	123.0	5													
30 TO 35	0.03	19.6	0													
ABOVE 35	2.78	1295.3	0													
TOTAL	4.06	1783.6	21													

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.02	3.0	0													
1 TO 2	0.02	16.9	3													
2 TO 5	0.09	19.4	4													
5 TO 10	0.11	33.6	0													
10 TO 15	0.12	43.4	0													
15 TO 20	0.05	19.2	0													
20 TO 25	0.05	20.1	0													
25 TO 30	0.03	123.0	5													
30 TO 35	0.03	19.6	0													
ABOVE 35	4.15	1438.0	3													
TOTAL	5.61	2003.6	24													



TABLE D7a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
MCGUIRE AFB, NEW JERSEY  
FOR THE  
MONTH OF FEBRUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.14	96.2	0																				
20 TO 25	0.15	99.0	0																				
25 TO 30	0.19	76.1	0																				
30 TO 35	1.76	758.0	124							1	2	11	31	47	10	7	3	1	2	1			
ABOVE 35	8.75	3818.3	13										2	12	1								
TOTAL	11.00	4765.1	137							1	2	11	33	57	19	7	3	1	2	1			

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.14	20.4	15																				
1 TO 2	0.05	8.2	0										2	3	6	3	1						
2 TO 5	0.33	75.3	85										1	5	10	13	10	12	3	3			
5 TO 10	0.24	72.1	0																				
10 TO 15	0.19	92.4	0																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	0.42	276.4	127										1	5	12	17	20	16	4	3			

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.14	20.4	15																				
1 TO 2	0.05	8.2	0									2	3	6	3	1							
2 TO 5	0.33	75.3	85								1	5	10	13	30	12	3	3					
5 TO 10	0.24	72.1	0																				
10 TO 15	0.19	92.4	0																				
15 TO 20	0.10	56.2	0																				
20 TO 25	0.15	59.0	0																				
25 TO 30	0.19	70.1	0																				
30 TO 35	1.76	758.0	124							1	2	11	31	47	10	7	3	1	2	1			
ABOVE 35	8.75	3818.3	13										2	10	1								
TOTAL	11.42	4001.5	245							1	1	7	23	50	107	33	11	6	1	2	1		

TABLE D7b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
MCGUIRE AFB, NEW JERSEY  
FOR THE  
MONTH OF MARCH

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.12	43.5	0																				
20 TO 25	0.10	34.7	0																				
25 TO 30	0.11	45.8	0																				
30 TO 35	5.21	2223.9	54																				
ABOVE 35	0.0	0.0	0											18	36								
TOTAL	5.53	2357.9	54											18	36								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.26	4.2	39							1	2	7	10	5	4	6	1	2					
1 TO 2	0.08	13.9	40								1	2	15	13	8	1							
2 TO 5	0.25	63.3	43								2	5	11	26	7	2							
5 TO 10	0.20	29.8	0																				
10 TO 15	0.11	37.0	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.60	193.6	132								1	5	14	36	43	19	9	3	2				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.40	0.2	39							1													
1 TO 2	0.08	13.9	40										1	2	7	10	4	4	6	3	2		
2 TO 5	0.25	63.3	43										1	2	15	13	8	1					
5 TO 10	0.20	29.8	0										2	5	11	26	7	2					
10 TO 15	0.11	37.0	0																				
15 TO 20	0.12	43.5	0																				
20 TO 25	0.10	34.7	0																				
25 TO 30	0.11	45.8	0																				
30 TO 35	5.21	2223.9	54																				
ABOVE 35	0.0	0.0	0																				
TOTAL	6.19	2506.6	104							1	5	14	54	79	19	9	3	2					



TABLE DB6  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	5.23	1079.4	66					1	2		3	5	22	24	6	3							
20 TO 25	8.15	3284.4	50									1	20	32	3	2							
25 TO 30	23.13	9637.1	83									4	24	49	3	2	1						
30 TO 35	92.57	40596.9	492						1	6	16	34	130	231	35	17	5	6	3				
ABOVE 35	131.66	59159.7	370						1	2	4	30	169	313	37	7	4	2	1				
TOTAL	261.74	114551.6	1269					1	4	8	23	74	373	649	84	31	12	8	4				

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	2.1	302.8	487							3	26	56	89	103	107	57	29	10	4	2	1		
1 TO 2	2.72	490.9	371							3	10	32	95	132	65	18	11	3	2				
2 TO 5	7.57	1599.7	433	1				1	4	10	18	29	104	168	56	30	8	1	1	1		1	
5 TO 10	7.21	1986.6	215					1		3	21	56	96	22	9	3	3	1					
10 TO 15	4.67	1561.7	66								5	19	32	2	4	4							
15 TO 20	3.27	133.6	2									1	1										
20 TO 25	0.14	132.6	42								3	15	18	5		1							
25 TO 30	0.41	170.7	0																				
30 TO 35	1.11	484.8	67						2	5	4	9	14	17	7	4	2	1	1		1		
ABOVE 35	1.87	821.1	14									4	10										
TOTAL	24.21	7656.5	1697	1				2	6	21	61	159	397	577	264	122	58	18	9	3	2	1	

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	2.1	332.8	487							3	26	56	89	103	107	57	29	10	4	2	1		
1 TO 2	2.92	492.9	371							3	10	32	95	132	65	18	11	3	2				
2 TO 5	7.57	1599.7	433	1					1	4	10	29	104	168	56	30	8	1	1	1		1	
5 TO 10	7.21	1986.6	215						1		3	21	56	96	22	9	3	3	1				
10 TO 15	4.67	1561.7	66								5	19	32	2	4	4							
15 TO 20	5.51	1983.0	60						1	2		3	5	23	25	4	3						
20 TO 25	0.49	3417.0	10								4	35	50	8	2	1							
25 TO 30	23.54	9837.9	83								4	24	49	3	2	1							
30 TO 35	93.68	41211.7	559							3	11	20	43	152	248	42	21	7	7	4		1	
ABOVE 35	134.53	59976.8	584							1	2	4	30	173	323	37	7	4	2	1			
TOTAL	284.95	122211.1	2966	1					3	10	29	84	229	775	1226	348	153	68	26	13	3	2	1

TABLE DB6  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	2.25	804.1	61					1	2		3	5	21	20	6	3							
20 TO 25	2.61	1125.5	40									1	14	20	3	2							
25 TO 30	11.36	4512.5	46									1	12	32		1							
30 TO 35	26.17	12901.1	210							1	2	13	78	107	13	3			1				
ABOVE 35	70.22	31242.1	462							1	2	4	25	141	248	29	5	4	2	1			
TOTAL	114.61	50184.2	827					1	3	3	9	45	266	427	51	14	4	3	1				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.63	122.9	152							2	8	15	29	26	20	20	15	7	1	1			
1 TO 2	1.23	205.2	72								6	20	26	14	4		1	1					
2 TO 5	3.60	773.4	190	1				1	1	5	6	12	92	75	35	11	1	1	1	1		1	
5 TO 10	2.84	826.2	190					1			3	20	38	53	23	8	3	3	1				
10 TO 15	1.81	613.4	56								5	15	27	1	4	4							
15 TO 20	0.10	36.9	2									1	1										
20 TO 25	0.36	22.3	28									1	14	11	2								
25 TO 30	0.14	17.6	0																				
30 TO 35	0.29	127.1	67						2	5	4	9	14	17	7	4	2	1	1		1		
ABOVE 35	0.	0.	0																				
TOTAL	12.01	2739.5	725	1				2	3	12	21	60	183	296	192	51	26	12	4	2	1	1	

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.63	172.9	152							2	8	15	29	26	20	20	15	7	1	1			
1 TO 2	1.23	205.2	72								6	20	26	14	4		1	1					
2 TO 5	3.60	773.4	190	1				1	1	5	6	12	54	75	30	11	1	1	1	1		1	
5 TO 10	2.84	826.2	190					1			3	20	38	53	23	8	3	3	1				
10 TO 15	1.81	613.4	56								5	15	27	1	4	4							
15 TO 20	2.15	842.6	83						2		3	5	22	21	6	3							
20 TO 25	2.87	1167.8	68								2	28	31	5	2								
25 TO 30	11.10	4928.0	66								1	12	32		1								
30 TO 35	26.36	12627.2	289						2	6	4	22	92	124	20	7	2	2	1		1		
ABOVE 35	70.22	31242.1	462						1	2	4	25	141	248	29	5	4	2	1				
TOTAL	125.41	52923.8	1552	1				3	6	15	30	113	449	663	153	65	30	15	5	2	1	1	



TABLE D03  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.21	75.0	1										1										
20 TO 25	0.35	134.5	2										1	1									
25 TO 30	0.97	423.0	1											1	1								
30 TO 35	6.40	2072.2	4										1	4	1								
ABOVE 35	7.42	3152.6	9										4	5									
TOTAL	15.43	6637.0	19										7	11	1								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	19.3	30									1	2	6	1	12	6	1	1				
1 TO 2	0.11	22.2	28							1	1	1	1	10	8	6	1	1					
2 TO 5	0.27	50.9	22						1				2	3	12	3	1						
5 TO 10	0.29	85.0	10									1	5	4									
10 TO 15	0.25	83.3	1											1									
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.22	96.0	0																				
ABOVE 35	0.49	206.5	14										4	10									
TOTAL	1.77	572.0	105						1	1	2	6	20	36	21	7	2	1					

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	UDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	19.3	30									1	2	6	12	6	1	1					
1 TO 2	0.11	22.2	28							1	1	1	10	8	6	1	1						
2 TO 5	0.27	50.9	22						1			2	3	12	3	1							
5 TO 10	0.29	85.0	10									1	5	4									
10 TO 15	0.25	83.3	1											1									
15 TO 20	0.21	75.0	1											1									
20 TO 25	0.35	134.5	2											1	1								
25 TO 30	0.97	423.0	1											1	1								
30 TO 35	6.70	2960.2	6											1	4	1							
ABOVE 35	7.92	3339.1	23											8	15								
TOTAL	17.20	7209.9	124						1	1	2	6	35	47	22	7	2	1					

TABLE D04  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.77	280.9	0																				
20 TO 25	0.71	270.9	0																				
25 TO 30	0.81	343.7	1																				
30 TO 35	17.45	7703.0	166										1	5	14	15	42	49	15	12	5	5	3
ABOVE 35	16.35	7146.5	1																				
TOTAL	36.29	15753.0	168										1	5	14	15	42	51	15	12	5	5	3

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.20	44.3	104								1	9	16	24	22	11	3						
1 TO 2	0.33	90.8	71									3	10	14	24	12	9		1				
2 TO 5	0.60	194.0	50								1	3	11	24	7	4							
5 TO 10	1.02	291.9	14											1	12		1						
10 TO 15	0.64	210.2	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	2.95	767.1	239								1	9	29	49	84	41	21	3		1		1	

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.20	44.3	104								5	16	21	24	22	11							
1 TO 2	0.33	90.8	71								3	10	16	24	12	5							
2 TO 5	0.60	194.0	50								1	3	11	24	7	4							
5 TO 10	1.02	291.9	14										1	12		1							
10 TO 15	0.64	210.2	0																				
15 TO 20	0.77	280.9	0																				
20 TO 25	0.71	270.9	0																				
25 TO 30	0.81	343.7	1																				
30 TO 35	17.45	7703.0	166							1	5	14	15	42	49	15	12	5	5	3			
ABOVE 35	16.35	7146.5	1												1								
TOTAL	36.04	16920.0	407							1	6	23	44	91	139	94	33	8	5	4		1	



TABLE D00  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
AUTUMN SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	2.31	717.4	4																				
20 TO 25	4.28	1745.5	16																				
25 TO 30	10.29	4399.2	35																				
30 TO 35	40.36	17521.7	102																				
ABOVE 35	38.67	17634.5	98																				
TOTAL	95.61	41978.4	295																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.77	118.2	201																				
1 TO 2	1.25	204.7	200																				
2 TO 5	3.02	613.5	163																				
5 TO 10	2.85	782.7	41																				
10 TO 15	1.96	651.9	9																				
15 TO 20	0.18	67.1	0																				
20 TO 25	0.28	113.3	14																				
25 TO 30	7.37	193.2	0																				
30 TO 35	0.60	261.7	0																				
ABOVE 35	1.38	614.6	0																				
TOTAL	12.68	3578.5	628																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.77	118.2	201																				
1 TO 2	1.25	204.7	200																				
2 TO 5	3.02	613.5	163																				
5 TO 10	2.85	782.7	41																				
10 TO 15	1.96	651.9	9																				
15 TO 20	2.19	784.5	4																				
20 TO 25	4.57	1855.8	39																				
25 TO 30	10.66	4512.4	35																				
30 TO 35	0.96	1778.4	102																				
ABOVE 35	0.34	1824.1	98																				
TOTAL	100.29	45556.4	883																				

TABLE D01  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
MONTH OF JANUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.54	197.1	2																				
20 TO 25	0.56	22.3	0																				
25 TO 30	0.72	305.7	3																				
30 TO 35	3.76	1864.1	10																				
ABOVE 35	29.74	12861.6	117																				
TOTAL	36.63	15248.6	132																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.19	28.0	37																				
1 TO 2	0.29	54.9	22																				
2 TO 5	0.60	134.6	27																				
5 TO 10	0.52	155.9	16																				
10 TO 15	0.46	155.0	1																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	2.38	529.2	133																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.19	28.0	37																				
1 TO 2	0.29	54.9	22																				
2 TO 5	0.60	134.6	27																				
5 TO 10	0.52	155.9	16																				
10 TO 15	0.46	155.0	1																				
15 TO 20	0.54	197.1	2																				
20 TO 25	0.56	220.3	0																				
25 TO 30	0.72	305.7	3																				
30 TO 35	3.76	1864.1	10																				
ABOVE 35	29.74	12861.6	117																				
TOTAL	36.71	15777.0	259																				



TABLE D0c  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
MONTH OF FEBRUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.06	310.3	56					1	1		3	5	20	17	6	3							
20 TO 25	1.06	672.6	15										3	5	8	2	2						
25 TO 30	4.27	1719.3	10										1	1	8								
30 TO 35	16.14	7091.9	103										1	2	12	72	86	10	1				
ABOVE 35	24.30	19825.0	213										1	10	59	126	13	2	2	1			
TOTAL	47.11	20619.9	477					1	1	1	6	28	155	243	31	8	2	1					

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.25	34.6	50									2	3	9	7	12	6	7	4					
1 TO 2	1.45	71.5	22									4	5	7	2	3	1							
2 TO 5	1.19	263.9	84									4	5	7	2	3	1							
5 TO 10	1.29	371.1	125									3	20	31	38	10	7	3	3	1				
10 TO 15	0.72	239.9	53									5	14	25	1	4	4							
15 TO 20	0.10	36.5	2										1	1										
20 TO 25	0.36	22.3	28										1	14	11	2								
25 TO 30	0.34	17.6	0																					
30 TO 35	4.29	127.1	67										2	5	4	9	14	17	7	4	2	1	1	
ABOVE 35	0.00	0.0	0																					
TOTAL	4.36	1184.6	431										1	3	9	10	48	107	143	54	27	17	9	2

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.25	34.6	50									2	3	9	7	12	6	7	4					
1 TO 2	1.45	71.5	22									4	5	7	2	3	1							
2 TO 5	1.19	263.9	84									4	5	7	2	3	1							
5 TO 10	1.29	371.1	125									3	20	31	38	10	7	3	3	1				
10 TO 15	0.72	239.9	53									5	14	25	1	4	4							
15 TO 20	0.96	346.8	58									3	5	21	18	6	3							
20 TO 25	1.72	695.0	43									1	17	19	4	2								
25 TO 30	4.11	1736.8	17										1	1	8									
30 TO 35	16.43	7219.0	290										2	6	6	21	86	101	17	5	2	2	1	
ABOVE 35	24.30	19825.0	213										1	10	59	126	13	2	2					
TOTAL	31.49	21804.4	908										2	4	10	16	76	262	386	85	35	19	10	2

TABLE D0d  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
MONTH OF MARCH

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDF DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1			0																				
1 TO 2		0.	0																				
2 TO 5		0.	0																				
5 TO 10		0.	0																				
10 TO 15		0.	0																				
15 TO 20	0.06	22.5	1										1										
20 TO 25	0.11	41.8	2										1	1									
25 TO 30	0.71	316.5	0																				
30 TO 35	4.29	1955.0	0																				
ABOVE 35	0.	0.	0																				
TOTAL	4.97	2233.8	3										2	1									

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.06	10.9	15										1	5	7	2							
1 TO 2	0.06	14.4	22										1	1	8	6	5	1					
2 TO 5	0.04	12.4	12											2	9	1							
5 TO 10	0.05	15.3	1											1									
10 TO 15	0.37	24.5	1																				
15 TO 20	0.00	0.0	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.00	0.0	0																				
30 TO 35	0.17	75.1	0																				
ABOVE 35	0.00	0.0	0																				
TOTAL	0.46	152.3	31										1	2	16	16	13	2	1				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.06	10.9	15											1	5	7	2						
1 TO 2	0.06	14.4	22										1	1	8	6	5	1					
2 TO 5	0.04	12.4	12											2	9	1							
5 TO 10	0.05	15.3	1											1									
10 TO 15	0.07	24.5	1													1							
15 TO 20	0.06	22.5	1											1									
20 TO 25	0.11	41.8	2													1	1						
25 TO 30	0.71	316.5	0																				
30 TO 35	4.26	1932.1	0																				
ABOVE 35	0.	0.	0																				
TOTAL	5.44	2366.1	34									1	2	10	17	13	2	1					



TABLE DBI  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
MONTH OF APRIL

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.12	42.3	0																				
20 TO 25	0.19	57.6	0																				
25 TO 30	0.17	72.1	0																				
30 TO 35	1.15	480.2	6																				
ABOVE 35	3.97	1674.5	9											1	4	1							
TOTAL	5.56	2326.6	15											4	5								
														5	9	1							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.5	6.6	6																				
1 TO 2	0.34	6.6	0																				
2 TO 5	0.19	36.4	10																				
5 TO 10	0.21	63.0	9																				
10 TO 15	0.15	50.3	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.35	23.9	0																				
ABOVE 35	0.49	266.5	14																				
TOTAL	1.19	387.3	39																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.35	6.6	6																				
1 TO 2	0.04	6.6	0																				
2 TO 5	0.19	36.4	10																				
5 TO 10	0.21	63.0	9																				
10 TO 15	0.15	50.3	0																				
15 TO 20	0.12	42.3	0																				
20 TO 25	0.19	57.6	0																				
25 TO 30	0.17	72.1	0																				
30 TO 35	1.20	501.1	6																				
ABOVE 35	4.46	1881.6	23																				
TOTAL	6.74	2713.9	54																				

TABLE DBJ  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
MONTH OF MAY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1			0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.33	12.2	0																				
20 TO 25	0.39	35.1	1																				
25 TO 30	0.38	35.2	1																				
30 TO 35	1.24	536.9	0																				
ABOVE 35	3.46	1458.1	0																				
TOTAL	4.90	2077.5	1																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.1	1.9	0																				
1 TO 2	0.01	1.1	0									1	1	1	1	1	1						
2 TO 5	0.34	10.1	0							1			2	2	1								
5 TO 10	0.33	10.8	0																				
10 TO 15	0.22	8.5	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.12	32.4	15							1	1	1	3	3	4	1	1						

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	3.1	1.4	0																				
1 TO 2	0.1	1.1	0																				
2 TO 5	0.34	10.1	0																				
5 TO 10	0.33	10.0	0																				
10 TO 15	0.22	8.5	0																				
15 TO 20	0.33	12.2	0																				
20 TO 25	0.39	35.1	0																				
25 TO 30	0.38	35.2	1																				
30 TO 35	1.24	536.9	0																				
ABOVE 35	3.46	1458.1	0																				
TOTAL	5.32	2109.0	16																				



TABLE DBA  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
MONTH OF JUNE

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0	0	0																				
1 TO 2	0	0	0																				
2 TO 5	0	0	0																				
5 TO 10	0	0	0																				
10 TO 15	0	0	0																				
15 TO 20	0.18	68.1	0																				
20 TO 25	0.16	62.1	0																				
25 TO 30	0.19	65.7	0																				
30 TO 35	0.47	2832.6	0																				
ABOVE 35	2.95	1294.5	0																				
TOTAL	9.95	4337.9	0																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	12.0	33																				
1 TO 2	0.09	16.8	24																				
2 TO 5	0.11	28.4	7																				
5 TO 10	0.20	84.7	7																				
10 TO 15	0.17	60.3	0																				
15 TO 20	0	0	0																				
20 TO 25	0	0	0																				
25 TO 30	0	0	0																				
30 TO 35	0	0	0																				
ABOVE 35	0	0	0																				
TOTAL	0.73	202.2	71																				
											3	9	14	34	7	2							

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	12.0	33																				
1 TO 2	0.09	16.8	24																				
2 TO 5	0.11	28.4	7																				
5 TO 10	0.20	84.7	7																				
10 TO 15	0.17	60.3	0																				
15 TO 20	0.18	68.1	0																				
20 TO 25	0.16	62.1	0																				
25 TO 30	0.19	65.7	0																				
30 TO 35	0.47	2832.6	0																				
ABOVE 35	2.95	1294.5	0																				
TOTAL	10.60	4547.1	71																				

TABLE DBI  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
MONTH OF JULY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.27	100.9	0																				
20 TO 25	0.32	124.9	0																				
25 TO 30	0.34	143.9	0																				
30 TO 35	0.43	3745.0	140																				
ABOVE 35	5.28	2333.1	1																				
TOTAL	14.64	6417.9	141																				

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.14	21.4	51																				
1 TO 2	0.14	21.0	20																				
2 TO 5	0.41	78.6	17																				
5 TO 10	0.40	127.6	6																				
10 TO 15	0.24	81.6	0																				
15 TO 20	0	0	0																				
20 TO 25	0	0	0																				
25 TO 30	0	0	0																				
30 TO 35	0	0	0																				
ABOVE 35	0	0	0																				
TOTAL	1.41	331.0	94																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.14	21.4	51							1	2	7	11	9	5	10	0	3					
1 TO 2	0.14	21.0	20							2	2	6	5	4	1							1	
2 TO 5	0.41	78.6	17							1	2	4	7	3									
5 TO 10	0.40	127.6	6										6										
10 TO 15	0.24	81.6	0																				
15 TO 20	0.27	100.9	0																				
20 TO 25	0.32	124.9	0																				
25 TO 30	0.34	143.9	0																				
30 TO 35	0.43	3745.0	140						1	5	14	15	34	31	15	12	5	5	3				
ABOVE 35	5.20	2333.1	1										1										
TOTAL	16.55	6740.9	235						1	6	19	26	55	59	31	21	8	5	3			1	



TABLE DBm  
DISTRIBUTIONS OF OBSERVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
MONTH OF AUGUST

NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.31	111.9	0																				
20 TO 25	0.23	91.9	0																				
25 TO 30	0.20	119.1	1																				
30 TO 35	2.56	1125.4	26																				
ABOVE 35	8.11	3548.9	0																				
TOTAL	11.50	4997.2	27																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.27	13.8	20									1	4	2	4	6	3						
1 TO 2	0.39	23.2	27									1	4	5	6	0	3						
2 TO 5	0.16	46.9	26									1	5	12	4	6				1			
5 TO 10	0.26	79.6	1																				
10 TO 15	0.22	76.3	0												1								
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.81	233.9	74									1	9	12	23	10	10			1			

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.37	13.8	20																				
1 TO 2	0.49	23.2	27																				
2 TO 5	0.16	46.9	26																				
5 TO 10	0.26	79.6	1																				
10 TO 15	0.22	76.3	0																				
15 TO 20	0.31	111.9	0																				
20 TO 25	0.23	91.9	0																				
25 TO 30	0.20	119.1	1																				
30 TO 35	2.56	1125.4	26																				
ABOVE 35	8.11	3548.9	0																				
TOTAL	12.31	5311.1	101																				

TABLE DBm  
DISTRIBUTIONS OF OBSERVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
MONTH OF SEPTEMBER

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.27	96.1	0																				
20 TO 25	0.37	141.9	4																				
25 TO 30	0.32	129.0	0																				
30 TO 35	10.69	4922.6	1																				
ABOVE 35	7.97	3384.3	1																				
TOTAL	19.62	8275.0	6																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.06	9.7	25									3	5	10	6	1							
1 TO 2	0.20	43.3	50									4	8	25	6	3	3	1					
2 TO 5	0.37	80.3	17										4	10		1	2						
5 TO 10	0.49	133.7	2											2									
10 TO 15	0.33	109.8	0																				
15 TO 20	0.03	12.0	0																				
20 TO 25	0.07	25.0	0																				
25 TO 30	0.07	25.0	0																				
30 TO 35	0.06	24.3	0																				
ABOVE 35	0.07	29.4	0																				
TOTAL	1.64	495.8	94									7	17	47	12	5	5	1					

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.06	9.7	25										3	5	10	1							
1 TO 2	0.20	43.3	50										4	8	25	6	3	3	1				
2 TO 5	0.37	80.3	17										4	10		1	2						
5 TO 10	0.49	133.7	2											2									
10 TO 15	0.33	109.8	0																				
15 TO 20	0.31	110.1	0																				
20 TO 25	0.43	147.9	4																				
25 TO 30	0.38	156.6	0										3	1									
30 TO 35	10.75	4946.3	1																				
ABOVE 35	8.04	3413.4	1																				
TOTAL	21.44	8778.8	100								7	20	50	12	9	5	1						



TABLE D8a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
MONTH OF OCTOBER

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.63	229.4	2											2									
20 TO 25	0.57	222.4	0																				
25 TO 30	4.17	1819.2	2											1	1								
30 TO 35	15.23	6713.4	0																				
ABOVE 35	15.40	7423.2	63																				
TOTAL	36.39	16602.6	67											3	17	30	3	2					
														3	18	41	3	2					

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.26	36.8	77																				
1 TO 2	0.36	57.5	72																				
2 TO 5	1.18	220.2	75																				
5 TO 10	1.26	276.7	18																				
10 TO 15	0.72	238.2	2																				
15 TO 20	0.12	42.9	2																				
20 TO 25	0.15	99.1	-																				
25 TO 30	0.20	84.2	0																				
30 TO 35	0.09	37.3	0																				
ABOVE 35	0.65	292.1	3																				
TOTAL	4.79	1353.6	244																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.26	36.8	77																				
1 TO 2	0.36	57.5	72																				
2 TO 5	1.18	220.2	75																				
5 TO 10	1.26	276.7	18																				
10 TO 15	0.72	238.2	2																				
15 TO 20	0.12	42.9	2																				
20 TO 25	0.15	99.1	-																				
25 TO 30	0.20	84.2	0																				
30 TO 35	0.09	37.3	0																				
ABOVE 35	0.65	292.1	3																				
TOTAL	4.18	17953.6	311																				

TABLE D8b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
MONTH OF NOVEMBER

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.13	393.9	2																				
20 TO 25	3.35	1381.2	12																				
25 TO 30	5.81	2413.9	33																				
30 TO 35	14.44	6289.4	101																				
ABOVE 35	14.45	6427.3	34																				
TOTAL	39.59	17192.8	182																				

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.46	71.7	99																				
1 TO 2	0.60	139.8	78								2	5	7	23	22	19	4	3					
2 TO 5	1.47	305.3	71						1	1	6	9	12	17	12	10	3						
5 TO 10	1.30	172.3	21										8	12	1								
10 TO 15	0.91	303.8	7										2	4	1								
15 TO 20	0.33	12.2	3																				
20 TO 25	0.37	25.4	14																				
25 TO 30	0.12	41.4	0																				
30 TO 35	0.46	199.8	6																				
ABOVE 35	0.65	293.1	3																				
TOTAL	6.25	1729.1	290						1	3	10	34	62	76	57	23	13		1	2			

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.46	71.7	99																				
1 TO 2	0.62	103.0	78																				
2 TO 5	1.47	305.3	71																				
5 TO 10	1.30	172.3	21																				
10 TO 15	0.91	303.8	7																				
15 TO 20	1.13	406.1	2																				
20 TO 25	3.42	1406.8	26																				
25 TO 30	5.91	2432.4	33																				
30 TO 35	14.40	6489.2	101																				
ABOVE 35	15.55	6920.4	34																				
TOTAL	49.69	18891.9	472																				



TABLE DB<sub>1</sub>  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
HICKAM AFB, HAWAII  
FOR THE  
MONTH OF DECEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.65	298.7	3																				
20 TO 25	0.59	232.5	25																				
25 TO 30	6.27	2485.5	33																				
30 TO 35	8.37	3744.1	25																				
ABOVE 35	16.79	7555.0	132																				
TOTAL	32.87	14315.0	210																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.39	58.3	65																				
1 TO 2	0.49	78.8	28																				
2 TO 5	1.81	374.9	87																				
5 TO 10	1.73	299.1	9																				
10 TO 15	0.63	214.7	2																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	4.34	1025.7	191																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.39	58.3	65																				
1 TO 2	0.49	78.8	28																				
2 TO 5	1.81	374.9	87																				
5 TO 10	1.73	299.1	9																				
10 TO 15	0.63	214.7	2																				
15 TO 20	0.65	298.7	3																				
20 TO 25	0.59	232.5	25																				
25 TO 30	6.27	2485.5	33																				
30 TO 35	8.37	3744.1	25																				
ABOVE 35	16.79	7555.0	132																				
TOTAL	37.21	16341.5	499																				



TABLE D9a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
MARF AIRPORT, MARF ISLAND

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.13	1499.7	59																				
20 TO 25	0.62	2644.1	34								1	1	2	21	26	0							
25 TO 30	30.16	11803.2	236									6	10	46	121	5							
30 TO 35	99.33	42796.8	745			1						16	48	290	679	81	21	2	1				
ABOVE 35	293.62	128696.1	1513								2	22	94	501	723	137	25	6	1				
TOTAL	432.36	185439.7	2787								1	1	1	6	45	155	693	1369	234	53	0	3	

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	2.40	354.0	221						1	1	5	13	26	29	55	66	21	8					
1 TO 2	3.76	630.1	253								2	11	30	70	34	32	14	6	9	1		1	
2 TO 5	5.82	1351.1	332								2	2	25	97	164	90	6	9		1			
5 TO 10	4.57	1367.0	91										5	24	44	7	1	1	1				
10 TO 15	4.23	1395.1	69										3	4	10	36	6	8	1	1			
15 TO 20	0.43	155.4	0																				
20 TO 25	0.39	149.9	0																				
25 TO 30	0.43	179.2	0																				
30 TO 35	0.69	292.2	1																				
ABOVE 35	1.51	643.0	21											1									
TOTAL	26.23	6506.0	980											4	9	39	3	30	21	7	3	1	
									1	1	12	33	94	209	358	138	30	21	7	3	1		

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	2.40	354.0	221				1	1		5	12	26	55	55	50	21	6			1	1		
1 TO 2	3.76	630.1	253							2	11	30	78	74	32	14	6	9					
2 TO 5	5.82	1351.1	332							2	2	25	97	144	50	6	9			1			
5 TO 10	4.57	1367.0	91							3	5	5	24	44	7	1	1	1					
10 TO 15	4.23	1395.1	69								3	4	10	34	6	0	1	1					
15 TO 20	4.50	1655.4	59						1	1	2	21	24	8									
20 TO 25	7.31	2794.0	34								1	7	20	5									
25 TO 30	30.59	11902.2	236									6	10	66	121	23							
30 TO 35	96.22	9199.0	946			1			1			18	48	299	674	91	21	2					
ABOVE 35	295.13	129335.1	1514						1	2	1	2	18	510	728	140	25	6	1				
TOTAL	432.36	185439.7	2775				1	2	2	16	20	259	1162	1722	1202	103	20	10	3	1			

TABLE D9b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
MARF AIRPORT, MARF ISLAND  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.62	223.5	2																				
20 TO 25	0.73	284.6	13																				
25 TO 30	0.78	325.2	2																				
30 TO 35	10.39	4576.2	391																				
ABOVE 35	50.99	22341.0	298																				
TOTAL	63.92	27953.5	756																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.31	43.7	38							2	3	4	5	10	5		4						
1 TO 2	0.28	42.1	7												1	2							
2 TO 5	0.86	182.3	33								1	1	6	19	4			1					
5 TO 10	0.68	189.9	22							1	2	1	4	9	3								
10 TO 15	0.53	174.9	13										3	2	3		3	1	1				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.31	135.1	6										3	3									
TOTAL	2.97	767.9	119							3	6	6	29	44	17	7	6			1			

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.31	43.7	38																				
1 TO 2	0.28	42.1	7																				
2 TO 5	0.66	182.3	33																				
5 TO 10	0.68	189.9	22																				
10 TO 15	0.53	174.9	13																				
15 TO 20	0.62	223.5	2																				
20 TO 25	0.73	284.6	13																				
25 TO 30	0.78	325.2	2																				
30 TO 35	10.39	4576.2	391																				
ABOVE 35	51.31	22676.1	356																				
TOTAL	66.49	28718.4	829																				



TABLE D9c  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
NAKE AIRPORT, NAKE ISLAND  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.29	43.3	47																				
1 TO 2	0.91	88.9	97																				
2 TO 5	0.99	245.3	70																				
5 TO 10	0.64	201.6	7																				
10 TO 15	0.53	182.1	24																				
15 TO 20	0.39	229.7	9								1	1	1	4	7	1							
20 TO 25	0.39	229.7	9									1	1	1	5	1							
25 TO 30	0.12	2407.8	7								2	1	1	3	1								
30 TO 35	0.12	2407.8	7											1									
ABOVE 35	0.45	18907.6	70									2	36	36	3	1							
TOTAL	62.56	27359.4	109								1	3	5	45	48	6	1						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.29	43.3	47					1	1	2	4	6	10	5	10	7	1						
1 TO 2	0.91	88.9	97								6	1	15	15	10	6							
2 TO 5	0.99	245.3	70							2	6	7	14	20	21	3	3		3	1			
5 TO 10	0.64	201.6	7											1	9								
10 TO 15	0.53	182.1	24							1													
15 TO 20	0.	0.	0								2	3	3	13	1	5							
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	2.97	769.7	205				1	1	6	12	17	43	55	30	21	7	3	1					

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.29	43.3	47				1	1															
1 TO 2	0.91	88.9	97																				
2 TO 5	0.99	245.3	70								1	6	1	15	15	6	3		3	1			
5 TO 10	0.64	201.6	7								2				1	9							
10 TO 15	0.53	182.1	24									2	3	3	10	1	5						
15 TO 20	0.65	237.9	15								1	1	1	4	7	1							
20 TO 25	0.59	229.7	9									1	1	5	1								
25 TO 30	0.12	2407.8	7									2	1	3	1								
30 TO 35	0.12	2407.8	7																				
ABOVE 35	0.45	18907.6	70									2	36	36	3	1							
TOTAL	65.53	28120.1	314									22	60	103	64	22		7	3	1			

TABLE D9d  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
NAKE AIRPORT, NAKE ISLAND  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.35	199.9	14											3	0	3							
20 TO 25	0.39	230.3	0																				
25 TO 30	0.74	310.1	1																				
30 TO 35	6.12	2400.6	2																				
ABOVE 35	46.98	20933.0	366																				
TOTAL	54.98	24362.5	103																				
				1				1	1	1	0	35	116	153	39	9	4	1					
				1				1	1	1	0	35	117	164	42	9	4	1					

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.29	74.0	91									4	7	15	14	9	2	1					
1 TO 2	1.32	177.7	46									1	0	17	10	6	2		2		1		
2 TO 5	0.55	122.3	12											2	7	2	1						
5 TO 10	0.50	167.6	21									1	1	4	11	3		1					
10 TO 15	0.33	171.3	10											2	7	1							
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	3.14	713.9	140									6	10	30	49	21	5	2	2		1		

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.32	74.0	91																				
1 TO 2	1.12	177.7	46									7	13	14	9	2	1						
2 TO 5	0.53	122.5	12								1	0	17	10	6	2							
5 TO 10	0.30	167.6	21										2	7	2	1							
10 TO 15	0.33	171.3	10								1	1	6	11	3		1						
15 TO 20	0.35	190.9	14										2	7	1								
20 TO 25	0.39	233.3	9										3	0	3								
25 TO 30	0.14	213.1	1																				
30 TO 35	0.12	2099.6	2												1								
ABOVE 35	0.40	20933.0	76												2								
TOTAL	58.14	25876.3	193		1		1	1	1	0	39	114	153	39	63	14	6	3		1			



TABLE D90  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
AUTUMN SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	2.32	838.9	28										1	13	10	4							
20 TO 25	4.71	1694.5	13										1	5	5	2							
25 TO 30	22.51	8799.9	226										1	4	9	43	118	2	7				
30 TO 35	46.47	27956.6	551										2	13	204	292	35	5					
ABOVE 35	152.29	66314.5	771										1	11	34	229	415	71	9	1			
TOTAL	249.20	105767.4	1589										1	2	17	57	514	840	134	21	1	2	

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.30	193.1	85																				
1 TO 2	1.94	329.8	143																				
2 TO 5	3.45	802.9	217																				
5 TO 10	2.66	788.0	41																				
10 TO 15	2.64	866.8	22																				
15 TO 20	2.43	155.6	0																				
20 TO 25	6.39	149.9	0																				
25 TO 30	6.43	179.2	0																				
30 TO 35	6.69	292.2	1																				
ABOVE 35	1.19	537.9	15																				
TOTAL	15.14	4263.5	524																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.30	193.1	85																				
1 TO 2	1.94	329.8	143																				
2 TO 5	3.45	802.9	217																				
5 TO 10	2.66	788.0	41																				
10 TO 15	2.64	866.8	22																				
15 TO 20	2.75	994.5	28																				
20 TO 25	5.10	2649.3	13																				
25 TO 30	22.94	8939.1	226																				
30 TO 35	67.16	28246.8	552																				
ABOVE 35	154.18	66822.4	786																				
TOTAL	249.14	110577.9	2113																				

TABLE D91  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
MONTH OF JANUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.11	39.5	1																				
20 TO 25	0.12	45.6	13											1	10	2							
25 TO 30	0.16	59.2	2												2								
30 TO 35	1.01	705.7	382																				
ABOVE 35	0.98	3821.8	56										14	35	92	177	46	16	2				
TOTAL	10.46	4671.9	494										1	10	23	16	4	2					
													15	45	116	206	52	18	2				

STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.06	8.6	3																				
1 TO 2	0.06	9.7	0																				
2 TO 5	0.17	21.0	1																				
5 TO 10	0.16	41.1	17																				
10 TO 15	0.10	33.5	1																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	2.46	114.6	22																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.06	8.6	3																				
1 TO 2	0.06	9.7	0																				
2 TO 5	0.10	21.8	1																				
5 TO 10	0.14	41.1	17																				
10 TO 15	0.10	33.5	1																				
15 TO 20	0.11	39.5	1																				
20 TO 25	0.12	45.6	13																				
25 TO 30	0.16	59.2	2																				
30 TO 35	1.01	705.7	382																				
ABOVE 35	0.98	3821.8	56																				
TOTAL	11.42	4786.4	476																				



TABLE DPH  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND

WAKE AIRPORT, WAKE ISLAND  
FOR THE  
MONTH OF FEBRUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.	0.	0													
1 TO 2	0.	0.	0													
2 TO 5	0.	0.	0													
5 TO 10	0.	0.	0													
10 TO 15	0.	0.	0													
15 TO 20	0.24	56.0	1													
20 TO 25	0.20	100.0	0													
25 TO 30	0.27	111.0	0													
30 TO 35	0.91	2370.0	2													
ABOVE 35	16.91	7020.0	50													
TOTAL	20.00	10230.0	50													

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.10	14.1	20													
1 TO 2	0.00	12.0	1													
2 TO 5	0.21	45.0	2													
5 TO 10	0.10	40.0	1													
10 TO 15	0.10	50.7	11													
15 TO 20	0.	0.	0													
20 TO 25	0.	0.	0													
25 TO 30	0.	0.	0													
30 TO 35	0.	0.	0													
ABOVE 35	0.31	130.1	4													
TOTAL	1.07	312.6	49													

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.10	14.1	20													
1 TO 2	0.00	12.0	1													
2 TO 5	0.21	45.0	2													
5 TO 10	0.10	40.0	1													
10 TO 15	0.10	50.7	11													
15 TO 20	0.24	56.0	1													
20 TO 25	0.20	100.0	0													
25 TO 30	0.27	111.0	0													
30 TO 35	0.91	2370.0	2													
ABOVE 35	17.23	7090.0	62													
TOTAL	20.00	10230.0	100													

TABLE DPH  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
MONTH OF MARCH

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.	0.	0													
1 TO 2	0.	0.	0													
2 TO 5	0.	0.	0													
5 TO 10	0.	0.	0													
10 TO 15	0.	0.	0													
15 TO 20	0.00	35.2	0													
20 TO 25	0.00	35.0	0													
25 TO 30	0.11	44.9	0													
30 TO 35	0.00	35.3	0													
ABOVE 35	0.23	4104.3	4													
TOTAL	0.61	4336.0	4													

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.04	5.6	3													
1 TO 2	0.04	0.7	4													
2 TO 5	0.11	31.2	3													
5 TO 10	0.07	26.2	0													
10 TO 15	0.00	20.0	0													
15 TO 20	0.	0.	0													
20 TO 25	0.	0.	0													
25 TO 30	0.	0.	0													
30 TO 35	0.	0.	0													
ABOVE 35	0.	0.	0													
TOTAL	0.34	101.0	10													

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.04	5.6	3													
1 TO 2	0.04	0.7	4													
2 TO 5	0.11	31.2	3													
5 TO 10	0.07	26.2	0													
10 TO 15	0.00	20.0	0													
15 TO 20	0.	0.	0													
20 TO 25	0.	0.	0													
25 TO 30	0.11	44.9	0													
30 TO 35	0.00	35.3	0													
ABOVE 35	0.23	4104.3	4													
TOTAL	0.60	4407.0	10													



TABLE D8  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
MONTH OF APRIL

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.22	82.0	0																				
20 TO 25	0.17	64.1	0																				
25 TO 30	0.19	70.2	0																				
30 TO 35	10.65	4733.7	0																				
ABOVE 35	8.55	3633.6	18											6	10	1	1						
TOTAL	19.79	8591.6	18											6	10	1	1						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	14.9	26							1	1	1	2	0	3	6	3	1					
1 TO 2	0.19	31.4	26							1	3	1	0	5	2	2							
2 TO 5	0.38	89.8	20									2	5	2	0	1	2		3	1			
5 TO 10	0.16	48.2	2												2								
10 TO 15	0.16	53.3	2								2	1	3	9	1	4							
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	0.98	237.5	74						1	2	6	6	24	21	17	10	3	3	1				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	14.9	26							1													
1 TO 2	0.19	31.4	26							1	3	1	0	3	6	3							
2 TO 5	0.38	89.8	20							1	3	2	5	2	0	1		2	3	1			
5 TO 10	0.16	48.2	2											2									
10 TO 15	0.16	53.3	2								2	1	3	9	1	4							
15 TO 20	0.22	82.0	0																				
20 TO 25	0.17	64.1	0																				
25 TO 30	0.19	70.2	0																				
30 TO 35	10.65	4733.7	0																				
ABOVE 35	8.55	3633.6	18											6	10	1	1						
TOTAL	20.77	8829.1	112							1	2	6	6	30	31	10	11		3	3	1		

TABLE D9  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
MONTH OF MAY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.33	123.6	15								1	1	1	4	7	1							
20 TO 25	0.33	129.7	8										1	1	5	1							
25 TO 30	5.92	2284.7	7								2	1	3	3	1								
30 TO 35	1.81	807.3	1											1									
ABOVE 35	24.87	11089.5	54																				
TOTAL	33.16	14631.7	85								1	3	2	27	23	2							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	22.9	10																				
1 TO 2	0.28	48.4	27																				
2 TO 5	0.50	124.3	47																				
5 TO 10	0.41	127.1	5																				
10 TO 15	0.29	98.9	4																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	1.44	421.6	101																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	22.9	10																				
1 TO 2	0.28	48.4	27																				
2 TO 5	0.50	124.3	47																				
5 TO 10	0.41	127.1	5																				
10 TO 15	0.29	98.9	4																				
15 TO 20	0.33	129.6	15																				
20 TO 25	0.33	129.7	8																				
25 TO 30	5.92	2284.7	7																				
30 TO 35	1.81	807.3	1																				
ABOVE 35	24.87	11089.5	54																				
TOTAL	34.00	14653.4	106																				



TABLE D96  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
NAKE AIRPORT, NAKE ISLAND  
FOR THE  
MONTH OF JUNE  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.17	62.9	14											3	0	3							
20 TO 25	0.19	73.0	0																				
25 TO 30	0.25	105.0	0																				
30 TO 35	0.04	379.0	0																				
ABOVE 35	17.15	7867.6	30											11	17	2							
TOTAL	18.60	8488.9	44											14	25	5							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.39	55.0	20											1	4	9	10	3	1				
1 TO 2	0.02	141.0	32											1	7	13	4	4	2				
2 TO 5	0.10	24.7	2																				
5 TO 10	0.17	46.7	5																				
10 TO 15	0.20	59.0	10											2	7	1							
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	1.88	328.9	77								2	11	24	28	8	3		1					

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.39	55.0	20											1	4	9	10	3	1				
1 TO 2	0.02	141.0	32											1	7	13	4	4	2				
2 TO 5	0.10	24.7	2																				
5 TO 10	0.17	46.7	5																				
10 TO 15	0.20	59.0	10											2	7	1							
15 TO 20	0.17	62.9	14											1	8	3							
20 TO 25	0.19	73.0	0																				
25 TO 30	0.25	105.0	0																				
30 TO 35	0.04	379.0	0																				
ABOVE 35	17.15	7867.6	30											11	17	2							
TOTAL	2.28	8817.0	121											2	11	30	53	13	3				

TABLE D91  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
NAKE AIRPORT, NAKE ISLAND  
FOR THE  
MONTH OF JULY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.21	76.4	0																				
20 TO 25	0.22	85.7	0																				
25 TO 30	0.23	98.5	0																				
30 TO 35	1.68	759.7	0																				
ABOVE 35	17.48	7766.3	1											1									
TOTAL	19.82	8786.0	1											1									

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.27	12.9	19									3	2	4	4	5	1						
1 TO 2	0.0	15.0	12										1	2	6	2		1					
2 TO 5	0.20	47.3	6											1	3	1	1						
5 TO 10	0.17	53.1	0																				
10 TO 15	0.17	57.2	0																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	0.88	185.5	37									3	3	7	13	8	2		1				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	12.9	19											3	2	4	4	3	1				
1 TO 2	0.08	15.0	12											1	2	6	2	1					
2 TO 5	0.20	47.3	6																				
5 TO 10	0.17	53.1	0											1	3	1	1						
10 TO 15	0.17	57.2	0																				
15 TO 20	0.21	76.4	0																				
20 TO 25	0.22	85.7	0																				
25 TO 30	0.23	98.5	0																				
30 TO 35	1.68	759.7	0																				
ABOVE 35	17.48	7766.3	1											1									
TOTAL	20.91	8972.1	30									3	3	0	13	8	2						



TABLE D9a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
MONTH OF AUGUST

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.17	60.2	0																				
20 TO 25	0.18	70.8	0																				
25 TO 30	0.26	105.9	1																				
30 TO 35	3.60	1550.9	2																				
ABOVE 35	12.35	5299.1	335																				
TOTAL	16.56	7087.3	336																				
														</									

				STORM CONDITIONS																			
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.4	6.1	4										1		1		1			1			
1 TO 2	0.12	21.0	2											2									
2 TO 5	0.23	50.6	4											1	2	1							
5 TO 10	0.24	67.7	16								1	1	4	6	3		1						
10 TO 15	0.16	56.1	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.79	199.4	26								1	2	7	6	5		2			1			

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.34	6.1	2																				
1 TO 2	0.12	21.0	4										2		1		1						
2 TO 5	0.23	50.6	4										1	2	1								
5 TO 10	0.24	67.7	16								1	1	4	6	3		1						
10 TO 15	0.16	56.1	0																				
15 TO 20	0.17	67.2	0																				
20 TO 25	0.18	70.8	0																				
25 TO 30	0.26	105.9	1																				
30 TO 35	3.60	1550.9	2											1									
														2									
ABOVE 35	12.35	5299.1	335																				
TOTAL	17.35	7286.5	364																				

TABLE D9a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
MONTH OF SEPTEMBER

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	6.26	91.9	1												1								
20 TO 25	1.30	544.7	3												2								
25 TO 30	0.43	175.4	0																				
30 TO 35	12.90	5425.9	20											3	14	3							
ABOVE 35	15.22	6983.3	60											5	20	27	8						
TOTAL	30.11	12821.3	92											5	32	44	11						

				STORM CONDITIONS																			
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.16	25.0	35																				
1 TO 2	0.32	55.2	16										5	9	11	6	4						
2 TO 5	0.39	92.9	22										2	4	6	4							
5 TO 10	0.33	101.3	1											3	10	3							
10 TO 15	0.29	97.2	1												1								
15 TO 20	0.12	42.3	0												1								
20 TO 25	0.11	44.2	0																				
25 TO 30	0.29	30.0	0																				
30 TO 35	0.34	16.3	1																				
ABOVE 35	0.	0.	0										1										
TOTAL	1.65	512.3	76										7	17	25	13	4						

STORM PLUS NON-STORM																						
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIDE DISTRIBUTION (FT./SEC.)																		
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30
BELOW 1	0.16	25.0	35									9	9	11	6	4						
1 TO 2	0.32	55.2	16									2	4	6	4							
2 TO 5	0.39	92.9	22										3	16	3							
5 TO 10	0.33	101.3	1											1								
10 TO 15	0.29	97.2	1											1								
15 TO 20	0.17	134.2	1											1								
20 TO 25	1.41	568.0	3										1	2								
25 TO 30	0.52	213.4	0																			
30 TO 35	12.94	5442.3	21											4	14	3						
ABOVE 35	15.22	6983.3	60											5	20	27	0					
TOTAL	31.97	13333.5	160										12	49	79	24	4					



TABLE D9a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
NAKE AIRPORT, NAKE ISLAND  
FOR THE  
MONTH OF OCTOBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.76	276.9	3											2	1								
20 TO 25	0.96	378.1	3												2								
25 TO 30	1.18	409.9	4																				
30 TO 35	27.60	11813.4	76										2	3	23	43	4	1					
ABOVE 35	50.16	25576.5	429									1	4	15	111	252	40	5	1				
TOTAL	88.66	38533.7	513									1	6	18	136	298	64	6	1				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	72.6	17																				
1 TO 2	0.00	107.0	43																				
2 TO 5	1.23	202.7	32																				
5 TO 10	1.05	320.4	14																				
10 TO 15	0.05	310.2	4																				
15 TO 20	0.31	113.3	0																				
20 TO 25	0.27	109.7	0																				
25 TO 30	0.34	101.2	0																				
30 TO 35	0.05	275.9	0																				
ABOVE 35	0.07	615.6	2																				
TOTAL	6.00	2150.6	112																				
									</														

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	GUE DISTRIBUTION (FT./SEC.)																							
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35				
BELOW 1	0.00	0.0	17																								
1 TO 2	0.00	137.9	43																								
2 TO 5	1.23	202.7	32							1	3	7	12	11	9	4	1										
5 TO 10	1.25	320.4	14										4	7	1												
10 TO 15	0.95	310.2	4											4													
15 TO 20	1.17	300.2	3											2	1												
20 TO 25	1.24	405.0	2																								
25 TO 30	1.52	637.1	5																								
30 TO 35	20.36	1200.3	70																								
ABOVE 35	59.12	25993.1	431								2	3	23	43	4	1											
TOTAL	95.36	40600.4	622								1	4	15	112	292	61	9	1									
											2	10	20	169	260	60	12	2	1								

TABLE D9b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
NAKE AIRPORT, NAKE ISLAND  
FOR THE  
MONTH OF NOVEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.0	0																				
5 TO 10	0.00	0.0	0																				
10 TO 15	0.00	0.0	0																				
15 TO 20	1.31	672.1	24																				
20 TO 25	2.45	976.7	8										1	11	6	4							
25 TO 30	25.90	903.8	226																				
30 TO 35	26.16	10716.3	459						1		4		9	63	110	22					1		
ABOVE 35	79.61	34156.7	274										7	14	90	134	23						
TOTAL	130.42	94612.4	987						1		1	11	14	344	490	79	15			2			

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	GUE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	1.03	429.3	169																				
5 TO 10	1.20	366.2	26																				
10 TO 15	1.40	459.4	17																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.22	92.1	19																				
TOTAL	6.30	1596.6	333																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	33							1													
1 TO 2	0.00	166.0	04								1	12	27	31	9								
2 TO 5	1.03	425.3	163								1	17	50	66	17		2						
5 TO 10	1.20	366.2	26							1	1	9	9	11									
10 TO 15	1.40	690.4	17								1	2	12	1		1				1			
15 TO 20	1.31	672.1	24									1	11	0	4								
20 TO 25	2.05	976.7	0										4	1	2								
25 TO 30	20.90	800.6	230											110	22								
30 TO 35	20.16	10710.3	295				1		1	4		9	66	110	22		7			1			
ABOVE 35	79.03	34240.0	207								7	10	95	130	25		4						
TOTAL	136.01	54000.0	1373				1		3	16	76	456	631	112	22		5		2	1			



TABLE DPM  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
NAKE AIRPORT, NAKE ISLAND  
FOR THE  
MONTH OF DECEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WGD DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.27	97.2	0																				
20 TO 25	0.36	136.7	0																				
25 TO 30	0.37	134.1	0																				
30 TO 35	2.07	1291.0	7																				
ABOVE 35	25.10	11350.5	104																				
TOTAL	26.97	12048.4	109																				

		1	6				
2	11	01	70	10	3	1	
2	11	02	76	10	3	1	

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WGD DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	21.0	7																				
1 TO 2	0.16	20.1	6																				
2 TO 5	0.55	116.7	30																				
5 TO 10	0.36	100.6	4																				
10 TO 15	0.24	81.7	1																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.43	340.0	48																				

		1	17	19	6		1
--	--	---	----	----	---	--	---

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WGD DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	21.0	7								1												
1 TO 2	0.16	20.1	6										2	1	2								
2 TO 5	0.55	116.7	30								1	1	7	10	3		1						
5 TO 10	0.36	100.6	4										4										
10 TO 15	0.24	81.7	1										1										
15 TO 20	0.27	97.2	0																				
20 TO 25	0.36	136.7	0																				
25 TO 30	0.37	134.1	0																				
30 TO 35	2.07	1291.0	7																				
ABOVE 35	25.10	11350.5	104																				
TOTAL	30.40	12388.4	241								2	11	1	6	10	3	1						
											4	12	99	70	20	3	2						

		1	6				
2	11	01	70	10	3	1	
4	12	09	95	26	3	2	



TABLE D106  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
YOKOTA AB, JAPAN

NON-STORM CONDITIONS																								
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.	0.	0																					
1 TO 2	0.	0.	0																					
2 TO 5	0.	0.	0																					
5 TO 10	0.	0.	0																					
10 TO 15	0.	0.	0																					
15 TO 20	1.77	662.5	9											2	7									
20 TO 25	2.05	793.2	2											2										
25 TO 30	11.53	4572.2	160						1	1	1	6	17	67	50	11	3	3						
30 TO 35	66.82	22618.9	429						1	3	9	26	163	183	34	6	3			1				
ABOVE 35	66.44	29273.4	455									6	47	147	202	40	12	1						
TOTAL	148.61	63897.2	1255						1	2	4	21	90	379	444	85	21	7		1				

STORM CONDITIONS																								
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.62	91.2	112								5	3	19	26	23	26	10	3						
1 TO 2	0.69	112.6	136								2	7	21	29	34	31	10	2						
2 TO 5	1.16	268.7	95								3	15	20	39	13	4	2	1	1					
5 TO 10	1.71	476.2	109				1	1	1	2	3	12	27	32	20	8	2							
10 TO 15	1.37	457.7	23								2	2	6	10	1	2								
15 TO 20	0.11	38.6	0																					
20 TO 25	0.10	37.5	0																					
25 TO 30	0.12	49.9	0																					
30 TO 35	1.71	740.1	4								1		2	1										
ABOVE 35	3.67	1647.9	3																					
TOTAL	11.27	3903.4	482				1	1	1	9	19	65	110	142	88	34	9	1	2					

STORM PLUS NON-STORM																								
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.62	91.2	112								5	3	19	26	23	26	10	3						
1 TO 2	0.69	112.6	136								2	7	21	29	34	31	10	2						
2 TO 5	1.16	268.7	95								3	15	20	39	13	4	2							
5 TO 10	1.71	476.2	109								3	12	27	32	20	8	2							
10 TO 15	1.37	457.7	23								2	2	6	10	1	2								
15 TO 20	1.98	681.1	9										2											
20 TO 25	2.15	827.7	2																					
25 TO 30	11.66	4622.1	160																					
30 TO 35	68.54	29358.9	433																					
ABOVE 35	70.11	32921.3	450																					
TOTAL	159.99	67797.6	1537																					

TABLE D106  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS																								
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.	0.	0																					
1 TO 2	0.	0.	0																					
2 TO 5	0.	0.	0																					
5 TO 10	0.	0.	0																					
10 TO 15	0.	0.	0																					
15 TO 20	0.21	76.3	0																					
20 TO 25	0.24	94.0	0																					
25 TO 30	9.35	3663.4	148																					
30 TO 35	3.14	1416.5	0																					
ABOVE 35	1.67	768.7	0																					
TOTAL	14.61	5996.0	148																					

STORM CONDITIONS																								
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.26	9.4	16								3		1	5	4	1								
1 TO 2	0.16	25.9	19										1	9	7	1	1							
2 TO 5	0.13	28.4	17										2	2	9	1	1	1	1					
5 TO 10	0.32	83.4	0																					
10 TO 15	0.17	59.9	1																					
15 TO 20	0.	0.	0											1										
20 TO 25	0.	0.	0																					
25 TO 30	0.	0.	0																					
30 TO 35	0.21	95.2	0																					
ABOVE 35	3.67	1647.9	3																					
TOTAL	4.71	1949.6	54							3		4	17	23	3	2	1	1						

STORM PLUS NON-STORM																								
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.6	9.4	14								3		1	5	4	1								
1 TO 2	0.16	25.9	19										1	9	7	1	1							
2 TO 5	0.13	28.4	17										2	2	9	1	1	1	1					
5 TO 10	0.32	83.4	0																					
10 TO 15	0.17	59.9	1																					
15 TO 20	0.21	76.3	0											1										
20 TO 25	0.24	94.0	0																					
25 TO 30	9.35	3662.4	148																					
30 TO 35	3.35	1511.7	0																					
ABOVE 35	5.35	2396.6	3																					
TOTAL	19.33	7945.6	232											1	1	4	6	20	31	66	14	4	4	1



TABLE D100  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WGE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.17	62.9	0																				
20 TO 25	0.15	59.1	0																				
25 TO 30	0.25	109.6	12																				
30 TO 35	2.45	1006.4	101																				
ABOVE 35	14.47	6481.6	407																				
TOTAL	17.49	7793.2	520																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WGE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.03	3.6	3																				
1 TO 2	0.03	3.6	3								1	1			1	2							
2 TO 5	0.08	18.9	25									3	4	10	4		1						
5 TO 10	0.39	29.2	25						1	1	2	2	2	6	4			1					
10 TO 15	0.14	46.7	3								1	2		2									
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.37	104.4	62						1	1	4	8	4	22	14	9	1						

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WGE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.03	3.6	3																				
1 TO 2	0.03	3.6	3								1	1	1		1	2	1						
2 TO 5	0.08	18.9	25									9	4	10	6								
5 TO 10	0.39	29.2	25						1	1	2	2	2	0	4	4	1						
10 TO 15	0.14	46.7	3								1			2									
15 TO 20	0.17	62.9	0																				
20 TO 25	0.15	59.1	0																				
25 TO 30	0.25	109.6	12																				
30 TO 35	2.45	1006.4	101																				
ABOVE 35	14.47	6481.6	407									1	3	7		1							
												0	32	59	7	1							
TOTAL	17.86	7897.2	582									9	44	120	181	30	19	1					
									1	1	10	50	169	268	59	17	2						

TABLE D104  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WGE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.30	107.3	1										1										
20 TO 25	0.29	111.1	2											2									
25 TO 30	0.25	106.3	0																				
30 TO 35	9.70	4307.0	107								2	2	10	39	34	16	2	1				1	
ABOVE 35	11.41	5054.5	13									1	1	4	4	1	2						
TOTAL	21.05	9686.9	123								2	3	11	44	40	17	4	1				1	

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WGE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	7.6	12																				
1 TO 2	0.07	12.1	24																				
2 TO 5	0.18	36.6	10																				
5 TO 10	0.23	63.9	0																				
10 TO 15	0.23	79.1	2																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.76	198.9	48																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WGE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	7.6	12																				
1 TO 2	0.07	12.1	24																				
2 TO 5	0.18	36.6	10																				
5 TO 10	0.23	63.9	0																				
10 TO 15	0.23	79.1	2																				
15 TO 20	0.30	107.3	1																				
20 TO 25	0.29	111.1	2																				
25 TO 30	0.25	106.3	0																				
30 TO 35	9.70	4307.0	107																				
ABOVE 35	11.41	5054.5	13																				
TOTAL	22.71	9889.8	171																				



TABLE D100  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
AUTUMN SEASON

NON-STORM CONDITIONS																							
				WDF DISTRIBUTION (FT./SEC.)																			
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.10	396.4	8										1	7									
20 TO 25	1.37	525.9	0																				
25 TO 30	1.68	699.9	0																				
30 TO 35	51.53	21000.2	221																				
ABOVE 35	38.88	16988.6	35																				
TOTAL	94.96	40419.0	264																				

				STORM CONDITIONS																			
				WDE DISTRIBUTION (FT./SEC.)																			
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.48	70.6	83							2	3	14	16	16	21	7	3			1			
1 TO 2	0.42	69.6	87							2	5	14	18	19	23	5	1						
2 TO 5	0.78	164.7	43							2	0	13	14	16	2	3				1			
5 TO 10	1.09	300.0	84				1	1		1	1	10	25	24	16	4	1						
10 TO 15	3.82	272.1	17							1	2	3	0		1	2							
15 TO 20	6.11	38.6	0																				
20 TO 25	0.10	37.5	0																				
25 TO 30	0.12	49.9	0																				
30 TO 35	1.50	644.9	4							1			2	1									
ABOVE 35	0.	0.	0																				
TOTAL	9.43	1647.9	318				1	1		5	13	48	77	82	63	21	5			2			

STORM PLUS NON-STORM																							
				WDE DISTRIBUTION (FT./SEC.)																			
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.48	70.6	83							2	3	14	14	16	21	7	3			1			
1 TO 2	0.42	69.6	87							2	5	14	18	19	23	9	1						
2 TO 5	0.78	164.7	43							2	8	13	14	2	3					1			
5 TO 10	1.09	300.0	84				1	1		1	10	25	24	16	4	1							
10 TO 15	0.82	272.1	17							1	2	3	8	1	2								
15 TO 20	1.20	435.0	0										1										
20 TO 25	1.47	543.4	0																				
25 TO 30	1.81	749.8	0																				
30 TO 35	53.03	22453.1	229						1	1	7	11	94	95	11	3	2						
ABOVE 35	38.88	16988.6	35									2	15	17	1								
TOTAL	99.99	42047.0	582				1	1	1	4	19	51	189	200	75	24	7			2			

TABLE D101  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF JANUARY

NON-STORM CONDITIONS																							
				WDE DISTRIBUTION (FT./SEC.)																			
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	6.39	33.9	0																				
20 TO 25	0.07	29.7	0																				
25 TO 30	0.15	63.6	0																				
30 TO 35	3.14	1414.5	0																				
ABOVE 35	1.67	740.7	0																				
TOTAL	5.13	2292.5	0																				

				STORM CONDITIONS																			
				WDE DISTRIBUTION (FT./SEC.)																			
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	3.4	14																				
1 TO 2	0.78	13.5	18																				
2 TO 5	0.07	14.5	17																				
5 TO 10	0.07	21.4	0																				
10 TO 15	0.07	22.7	1																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.21	95.2	0																				
ABOVE 35	3.67	1647.9	3																				
TOTAL	4.20	1818.5	53																				

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	3.4	14																				
1 TO 2	0.30	13.5	18										1	5	4	1							
2 TO 5	0.37	14.5	17										2	2	9	1	1	1	1				
5 TO 10	0.07	21.4	0																				
10 TO 15	0.07	22.7	1											1									
15 TO 20	0.39	33.9	0																				
20 TO 25	0.07	29.7	0																				
25 TO 30	0.15	63.6	0																				
30 TO 35	3.35	1811.7	0																				
ABOVE 35	5.35	2396.6	3												3								
TOTAL	9.33	4111.0	53										3	17	23	3	2	1	1				



TABLE D10g  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF MARCH

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.12	43.9	0																				
20 TO 25	0.12	46.5	0																				
25 TO 30	0.18	77.2	11																				
30 TO 35	2.35	1042.4	101																				
ABOVE 35	12.49	5572.2	406																				
TOTAL	15.26	6762.1	518																				

	1	3	6		1
1	5	32	99	7	1
5	44	127	181	38	10
6	50	162	242	45	12

STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.03	3.6	3																				
1 TO 2	0.02	3.0	5																				
2 TO 5	0.05	14.1	16																				
5 TO 10	0.06	18.7	8																				
10 TO 15	0.09	31.3	0																				
15 TO 20	0.0	0	0																				
20 TO 25	0.0	0	0																				
25 TO 30	0.0	0	0																				
30 TO 35	0.0	0	0																				
ABOVE 35	0.0	0	0																				
TOTAL	0.25	70.7	32																				

9	9	12	8	3	1
---	---	----	---	---	---

STORM PLUS NON-STORM

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDF DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.03	3.6	3																				
1 TO 2	0.02	3.0	5										1	1	2								
2 TO 5	0.05	14.1	16										4	5	6	3	1						
5 TO 10	0.06	18.7	8												4	1	2	1					
10 TO 15	0.09	31.3	0																				
15 TO 20	0.12	43.9	0																				
20 TO 25	0.12	46.5	0																				
25 TO 30	0.18	77.2	11																				
30 TO 35	2.35	1042.4	101																				
ABOVE 35	12.49	5572.2	406																				
TOTAL	15.91	6852.0	550																				

	1	3	6		1	
1	5	32	59	7	1	
5	44	127	181	38	10	1
6	55	169	294	53	19	2

TABLE D10h  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF APRIL

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.0	18.7	0																				
20 TO 25	0.03	12.7	0																				
25 TO 30	0.07	28.5	1																				
30 TO 35	0.10	44.0	0																				
ABOVE 35	1.98	909.4	1																				
TOTAL	2.23	1013.2	2																				

1	1
---	---

STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.02	2.4	1								1												
2 TO 5	0.02	4.9	9								1	1	1	4	3								
5 TO 10	0.03	10.5	17						1	1	2	2	2	4	3	2							
10 TO 15	0.04	15.5	3								1			2									
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	0.12	33.2	30						1	1	4	3	3	10	6	2							

1	1	4	3	3	10	6	2
---	---	---	---	---	----	---	---

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.02	2.4	1																				
2 TO 5	0.02	4.9	9																				
5 TO 10	0.03	10.5	17																				
10 TO 15	0.04	15.5	3																				
15 TO 20	0.05	18.7	0																				
20 TO 25	0.03	12.7	7																				
25 TO 30	0.07	28.5	1																				
30 TO 35	0.10	44.0	0																				
ABOVE 35	1.98	909.4	1																				
TOTAL	2.34	1046.4	32																				

1	1	4	3	4	11	6	2
---	---	---	---	---	----	---	---



TABLE D101  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF JUNE

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.10	37.0	1																				
20 TO 25	0.15	60.9	2																				
25 TO 30	0.12	50.7	0																				
30 TO 35	7.19	3197.5	107																				
ABOVE 35	5.34	2450.0	11																				
TOTAL	12.90	5796.1	121																				

STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	3.4	6																				
1 TO 2	0.02	4.3	6																				
2 TO 5	0.04	13.0	10																				
5 TO 10	0.06	20.6	6																				
10 TO 15	0.12	44.1	2																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.27	85.5	24																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	3.4	6																				
1 TO 2	0.02	4.3	6										1	2	1	2							
2 TO 5	0.04	13.0	10								1		1	6	1	1							
5 TO 10	0.06	20.6	0														1						
10 TO 15	0.12	44.1	2										2										
15 TO 20	0.10	37.0	1									1											
20 TO 25	0.15	60.9	2																				
25 TO 30	0.12	50.7	0																				
30 TO 35	7.19	3197.5	107																				
ABOVE 35	5.34	2450.0	11																				
TOTAL	13.17	5881.6	145																				

TABLE D102  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF AUGUST

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.20	73.3	0																				
20 TO 25	0.13	53.2	0																				
25 TO 30	0.13	55.6	0																				
30 TO 35	2.52	1113.3	0																				
ABOVE 35	6.27	2604.4	2																				
TOTAL	9.15	3896.8	2																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.03	6.1	6																				
1 TO 2	0.05	7.8	18																				
2 TO 5	0.13	23.6	0																				
5 TO 10	0.17	42.9	0																				
10 TO 15	0.11	35.0	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.49	113.4	24																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.03	6.1	6																				
1 TO 2	0.05	7.8	18																				
2 TO 5	0.13	23.6	0																				
5 TO 10	0.17	42.9	0																				
10 TO 15	0.11	35.0	0																				
15 TO 20	0.20	73.3	0																				
20 TO 25	0.13	53.2	0																				
25 TO 30	0.13	55.6	0																				
30 TO 35	2.52	1113.3	0																				
ABOVE 35	6.27	2604.4	2																				
TOTAL	9.54	3354.7	26																				



TABLE D10H  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF OCTOBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	6.77	205.2	4											1	3								
20 TO 25	6.97	371.1	0																				
25 TO 30	1.14	400.9	0																				
30 TO 35	30.01	14827.6	124																				
ABOVE 35	20.32	842.9	25																				
TOTAL	66.98	2,009.4	153																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.40	59.1	02																				
1 TO 2	0.27	43.0	52																				
2 TO 5	0.32	110.4	17																				
5 TO 10	1.76	211.3	63																				
10 TO 15	0.56	107.0	13																				
15 TO 20	0.11	30.6	0																				
20 TO 25	0.10	37.5	0																				
25 TO 30	0.12	40.9	0																				
30 TO 35	0.30	8.7	0																				
ABOVE 35	0.	0.	0																				
TOTAL	2.84	736.3	227							5	0	34	51	50	49	17	4		1				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT.)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.45	59.1	02																				
1 TO 2	0.27	43.0	52																				
2 TO 5	0.52	110.4	17																				
5 TO 10	1.76	211.3	63																				
10 TO 15	0.56	107.0	13																				
15 TO 20	0.08	32.9	4																				
20 TO 25	1.37	400.6	0																				
25 TO 30	1.26	332.4	0																				
30 TO 35	30.01	14828.3	124											1	1	3	4	92	93	7	1	2	
ABOVE 35	20.32	842.9	25											1	0	11	40	113	127	57	10	6	1
TOTAL	61.76	26743.7	300																				

TABLE D10I  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF NOVEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.32	113.1	4																				
20 TO 25	0.41	194.0	0																				
25 TO 30	0.54	219.4	0																				
30 TO 35	13.52	5700.6	97																				
ABOVE 35	10.05	8140.7	10																				
TOTAL	33.64	14413.6	111																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.30	11.3	1																				
1 TO 2	0.15	20.0	35																				
2 TO 5	0.25	94.3	26																				
5 TO 10	0.33	88.7	21																				
10 TO 15	0.26	99.0	4																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	1.00	646.2	4																				
ABOVE 35	0.	0.	0																				
TOTAL	2.89	909.6	91																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.30	11.3	1																				
1 TO 2	0.15	20.0	35																				
2 TO 5	0.25	94.3	26																				
5 TO 10	0.33	88.7	21																				
10 TO 15	0.26	99.0	4																				
15 TO 20	0.32	113.1	4																				
20 TO 25	0.41	194.0	0																				
25 TO 30	0.54	219.4	0																				
30 TO 35	13.52	5700.6	101																				
ABOVE 35	10.05	8140.7	10																				
TOTAL	36.23	15323.2	202																				



TABLE D10m  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TRAVIS AFB, CALIFORNIA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF DECEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.12	42.4	0																				
20 TO 25	0.17	64.4	0																				
25 TO 30	9.20	3996.0	140					1	1	1	6	16	64	43	11	2	3						
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	9.40	3703.5	140					1	1	1	6	16	64	43	11	2	3						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.04	6.0	0																				
1 TO 2	0.00	12.0	1										1										
2 TO 5	0.06	13.9	0																				
5 TO 10	0.22	62.0	0																				
10 TO 15	0.11	37.2	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.51	131.1	1										1										

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.04	6.0	0																				
1 TO 2	0.00	12.0	1										1										
2 TO 5	0.06	13.9	0																				
5 TO 10	0.22	62.0	0																				
10 TO 15	0.11	37.2	0																				
15 TO 20	0.12	42.4	0																				
20 TO 25	0.17	64.4	0																				
25 TO 30	9.20	3996.0	140					1	1	1	6	16	64	43	11	2	3						
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	10.00	3034.6	141					1	1	1	6	17	64	43	11	2	3						



TABLE D11a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KELLY AFB, TEXAS  
AND  
ELMENDORF AFB, ALASKA

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.75	275.1	2										1		1								
20 TO 25	0.90	306.6	3																				
25 TO 30	3.10	1301.7	17																				
30 TO 35	20.00	8996.6	27																				
ABOVE 35	47.11	21433.6	100																				
TOTAL	72.89	32011.5	226																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.25	34.7	97																				
1 TO 2	0.30	62.9	76				1			3	6	7	4	3	14	0	0	1	1				
2 TO 5	1.00	103.0	123						1	3	6	10	23	14	0	4							
5 TO 10	1.00	202.7	89					1	1	3	6	11	26	39	28	5	7	1					
10 TO 15	0.03	200.6	26								1	5	10	13	2	1							
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	1.	2.	0																				
TOTAL	3.29	640.7	371				1	1	1	8	17	31	84	119	66	24	16	2	1				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.25	34.7	97								3	6	7	4	5	10	9		1	1			
1 TO 2	0.30	62.9	76				1			2	6	0	10	23	14	0	9						
2 TO 5	0.00	103.0	123					1	1	3	4	11	28	30	28	5	2	1					
5 TO 10	1.00	202.7	89								1	9	32	41	0	1	1						
10 TO 15	0.03	200.6	26										10	13	2	1							
15 TO 20	0.00	0.	0									1		1									
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0							1	3	2	1	9		2		2			1		
ABOVE 35	47.11	21433.6	100								1	1	1	16	2	1			1				
TOTAL	76.10	32663.2	597				1	1	2	6	24	94	146	226	06	32	16	9	2	1			

TABLE D11b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KELLY AFB, TEXAS  
AND  
ELMENDORF AFB, ALASKA  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.25	72.7	2																				
20 TO 25	0.00	142.0	0																				
25 TO 30	0.40	164.0	1																				
30 TO 35	7.00	3119.1	13																				
ABOVE 35	16.05	6060.0	140																				
TOTAL	19.47	8365.6	156																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	12.0	22							1	2	1	3	2	5	3	5						
1 TO 2	0.11	17.0	40									5	6	7	10	7	4	2					
2 TO 5	0.31	61.0	42						1	1	2	1	3	0	10	7	4	1					
5 TO 10	0.10	60.0	20									1	3	7	11	4	1	1					
10 TO 15	0.00	0.0	0											1	3								
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.63	297.0	144						1	1	1	5	9	13	26	40	23	0	0				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	12.0	22								1	2	3	2	5	3	5						
1 TO 2	0.11	17.0	40								1	5	6	7	14	5	3	2					
2 TO 5	0.31	61.0	42								1	3	6	10	7	1	1						
5 TO 10	0.10	60.0	20								1	3	7	11	4	1	1						
10 TO 15	0.00	0.0	0										1	3									
15 TO 20	0.00	0.0	0										1	1	1								
20 TO 25	0.00	0.0	0																				
25 TO 30	0.40	164.0	1																				
30 TO 35	7.00	3119.1	13											1	1								
ABOVE 35	16.05	6060.0	140								1	10	30	50	17	5					1		
TOTAL	20.42	6405.1	300					1	1	1	5	10	32	66	100	41	13	0		1			



TABLE D11c  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KELLY AFB, TEXAS  
AND  
ELMENDORF AFB, ALASKA  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.40	145.1	0																				
20 TO 25	0.47	103.3	0																				
25 TO 30	2.57	1124.0	3																				
30 TO 35	9.48	4139.0	1																				
ABOVE 35	30.33	13590.6	24																				
TOTAL	43.25	19190.0	28											1	14	9							
														1	14	13							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.13	19.0	20							1		5		9	1	7	4			2			
1 TO 2	0.16	25.5	27								1	2	3	9	6	4	2						
2 TO 5	0.47	97.0	59							1	3	5	13	18	14	4	1						
5 TO 10	0.58	173.2	61										2	25	30	4							
10 TO 15	0.45	152.1	9											4	4	1							
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.78	467.6	176							2	4	14	45	62	32	12	5						

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.13	19.0	20										5	5	1								
1 TO 2	0.16	25.5	27									1	2	3	9	6	4	2					
2 TO 5	0.47	97.0	59								1	3	5	13	18	14	4	1					
5 TO 10	0.58	173.2	61										2	25	30	4							
10 TO 15	0.45	152.1	9										4	4	1								
15 TO 20	0.40	145.1	0																				
20 TO 25	0.47	103.3	0																				
25 TO 30	2.57	1124.0	3																				
30 TO 35	9.48	4139.0	1												3								
ABOVE 35	30.33	13590.6	24												1	14	9						
TOTAL	45.03	19657.6	204								2	4	15	59	75	32	12	5					

TABLE D11d  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KELLY AFB, TEXAS  
AND  
ELMENDORF AFB, ALASKA  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.47	24.5	0																				
20 TO 25	0.37	26.7	0																				
25 TO 30	0.38	35.0	0																				
30 TO 35	1.32	460.7	5																				
ABOVE 35	3.34	1342.1	5											1	3	1							
TOTAL	4.27	1809.9	10											3	6	1							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	2.5	10																				
1 TO 2	0.01	2.5	1																				
2 TO 5	0.34	8.9	10																				
5 TO 10	0.3	13.0	0																				
10 TO 15	0.33	11.4	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.13	36.1	21											1	3	2	6	1	5	1	2		

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	2.5	10																				
1 TO 2	0.01	2.5	1																				
2 TO 5	0.34	8.9	10																				
5 TO 10	0.3	10.8	0																				
10 TO 15	0.33	11.4	0																				
15 TO 20	0.37	24.5	0																				
20 TO 25	0.37	26.7	0																				
25 TO 30	0.38	35.0	0																				
30 TO 35	1.32	460.7	5																				
ABOVE 35	3.34	1342.1	5																				
TOTAL	4.41	1925.9	31																				



TABLE D110  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KELLY AFB, TEXAS  
AND  
ELMENDORF AFB, ALASKA  
FOR THE  
AUTUMN SEASON

NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.00	30.0	0																				
20 TO 25	0.00	30.0	0																				
25 TO 30	0.10	57.0	10																				
30 TO 35	2.01	1217.0	0																				
ABOVE 35	2.70	1224.2	11																				
TOTAL	5.90	2566.2	32																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.03	4.3	5																				
1 TO 2	0.10	17.1	0																				
2 TO 5	0.06	19.3	12																				
5 TO 10	0.14	43.4	0																				
10 TO 15	0.30	31.1	13																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.42	100.1	30																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	4.3	5																				
1 TO 2	0.10	17.1	0																				
2 TO 5	0.00	19.0	12																				
5 TO 10	0.10	40.4	0																				
10 TO 15	0.00	31.1	13																				
15 TO 20	0.00	30.0	0																				
20 TO 25	0.00	30.0	0																				
25 TO 30	0.10	57.0	13																				
30 TO 35	2.01	1217.0	0																				
ABOVE 35	2.70	1224.2	11																				
TOTAL	0.30	2676.3	62																				

TABLE D111  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KELLY AFB, TEXAS  
AND  
ELMENDORF AFB, ALASKA  
FOR THE  
MONTH OF JANUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.00	22.2	0																				
20 TO 25	0.00	30.0	0																				
25 TO 30	0.10	75.1	1																				
30 TO 35	0.00	1000.0	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.22	2127.7	7																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	0.0	2										2										
1 TO 2	0.00	0.0	0																				
2 TO 5	0.02	0.7	0																				
5 TO 10	0.03	10.0	0																				
10 TO 15	0.07	24.0	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.15	40.9	2										2										

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	2										2										
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.7	0																				
5 TO 10	0.00	10.0	0																				
10 TO 15	0.00	20.0	0																				
15 TO 20	0.00	22.2	0																				
20 TO 25	0.00	20.0	0																				
25 TO 30	0.00	0.0	1																				
30 TO 35	0.00	1000.0	0																				
ABOVE 35	0.0	0.0	0											1		1							
TOTAL	0.17	2176.6	0											3		0							



### NON-STORM CONDITIONS

### STORM CONDITIONS

**STORM PLUS NON-STORM**

TABLE D11b  
OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
NELLY AFB, TEXAS  
AND  
ELMENDORF AFB, ALASKA  
FOR THE  
MONTH OF MARCH

### NON-STOIC CONDITIONS

### STORM CONDITIONS

**STORM PLUS NON-STORM**

348



TABLE DIII  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KELLY AFB, TEXAS  
AND  
ELMENDORF AFB, ALASKA  
FOR THE  
MONTH OF JULY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.37	24.5	0																				
20 TO 25	0.07	26.7	0																				
25 TO 30	0.00	35.9	0																				
30 TO 35	1.02	460.7	5																				
ABOVE 35	3.34	1342.1	5											1	3	1							
TOTAL	4.27	1009.9	10											3	6	1							

STORM CONDITIONS

ALTITUDE 1000 FT.	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.2	2.5	10							1	3	1			2	1	2						
1 TO 2	0.31	2.5	1																				
2 TO 5	0.04	0.9	10									1	6	1	2								
5 TO 10	0.23	10.8	0																				
10 TO 15	0.43	11.4	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.13	36.1	21							1	3	2	6	1	9	1	2						

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	2.5	10							1	1					1	2						
1 TO 2	0.21	2.5	1																				
2 TO 5	0.04	0.9	10										1	6	1	2							
5 TO 10	0.23	10.8	0																				
10 TO 15	0.43	11.4	0																				
15 TO 20	0.37	24.5	0																				
20 TO 25	0.07	26.7	0																				
25 TO 30	0.00	35.9	0																				
30 TO 35	1.02	460.7	5																				
ABOVE 35	3.34	1342.1	5											1	3	1							
TOTAL	4.41	1025.9	31							1	3	2	0	7	6	1	2						

TABLE DIII  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KELLY AFB, TEXAS  
AND  
ELMENDORF AFB, ALASKA  
FOR THE  
MONTH OF SEPTEMBER

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.08	36.0	0																				
20 TO 25	0.39	36.5	0																				
25 TO 30	0.13	57.0	13																				
30 TO 35	2.01	1217.0	0																				
ABOVE 35	2.70	1224.2	11																				
TOTAL	5.90	2566.2	32																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.33	4.3	9																				
1 TO 2	0.10	17.1	0																				
2 TO 5	0.06	15.3	12																				
5 TO 10	0.14	40.4	0																				
10 TO 15	0.09	31.1	13																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.42	100.1	30											1	2	7	0	6	3		2	1	

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																				
(1000 FT.)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.33	4.3	9																					
1 TO 2	0.10	17.1	0																					
2 TO 5	0.06	15.3	12																					
5 TO 10	0.14	40.4	0																					
10 TO 15	0.09	31.1	13																					
15 TO 20	0.00	30.0	0																					
20 TO 25	0.00	30.0	0																					
25 TO 30	0.13	57.0	13																					
30 TO 35	2.01	1217.0	0																					
ABOVE 35	2.70	1224.2	11																					
TOTAL	6.32	2676.3	62											1	7	5	12	10	6	6		4	2	1



TABLE D12a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KFLY AFB, TEXAS  
AND  
DOVER AFB, DELAWARE

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.00	0.0	0																					
1 TO 2	0.00	0.0	0																					
2 TO 5	0.00	0.0	0																					
5 TO 10	0.00	0.0	0																					
10 TO 15	0.00	0.0	0																					
15 TO 20	0.44	190.5	0																					
20 TO 25	3.71	281.5	2											2										
25 TO 30	0.61	259.0	1											1										
30 TO 35	0.59	255.1	9											3	5	1								
ABOVE 35	10.81	8294.8	19											2	7	6	2							
TOTAL	21.16	9249.7	31											2	10	16	3							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	16.7	27																				
1 TO 2	0.25	37.4	77																				
2 TO 5	1.23	257.0	205																				
5 TO 10	0.59	165.0	16																				
10 TO 15	0.40	133.9	2																				
15 TO 20	0.00	0.0	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.00	0.0	0																				
30 TO 35	0.00	0.0	0																				
ABOVE 35	0.34	17.6	20																				
TOTAL	2.63	629.3	427																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	16.7	27																				
1 TO 2	0.25	37.4	77																				
2 TO 5	1.23	257.0	205																				
5 TO 10	0.59	165.0	16																				
10 TO 15	0.40	133.9	2																				
15 TO 20	0.44	190.5	2																				
20 TO 25	0.71	281.5	2																				
25 TO 30	0.61	259.0	1																				
30 TO 35	0.59	255.1	9																				
ABOVE 35	10.85	8312.4	39																				
TOTAL	23.80	9879.0	458																				

TABLE D12b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KELLY AFB, TEXAS  
AND  
DOVER AFB, DELAWARE  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.44	190.5	0																				
20 TO 25	3.71	281.5	2																				
25 TO 30	0.61	259.0	1																				
30 TO 35	0.59	255.1	9																				
ABOVE 35	10.81	8244.8	19																				
TOTAL	21.16	9249.7	31																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	16.7	27																				
1 TO 2	0.25	37.4	77																				
2 TO 5	1.23	257.0	205																				
5 TO 10	0.59	165.0	16																				
10 TO 15	0.40	133.9	2																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.34	17.6	20																				
TOTAL	2.63	629.3	427																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	16.7	27																				
1 TO 2	0.25	37.4	77																				
2 TO 5	1.23	257.0	205																				
5 TO 10	0.59	165.0	16																				
10 TO 15	0.40	133.9	2																				
15 TO 20	0.44	190.5	0																				
20 TO 25	0.71	281.5	2																				
25 TO 30	0.61	259.0	1																				
30 TO 35	0.59	255.1	9																				
ABOVE 35	10.85	8312.4	39																				
TOTAL	23.80	9879.0	458																				



TABLE D12c  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KELLY AFB, TEXAS  
AND  
DOVER AFB, DELAWARE  
FOR THE  
MONTH OF MARCH  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.44	150.5	0																				
20 TO 25	0.71	201.5	2																				
25 TO 30	0.61	259.0	1																				
30 TO 35	0.59	255.1	0																				
ABOVE 35	10.01	8294.0	19																				
TOTAL	21.16	9249.7	31											2	7	6	2						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	16.7	27							1	3	5	4	3	4	2							
1 TO 2	0.25	37.4	77							2	3	7	22	26	13	2	2						
2 TO 5	1.23	257.0	205				1	1	1	2	16	24	89	96	48	9			3		1		
5 TO 10	0.59	165.0	16							1	1	4	7	1	2								
10 TO 15	0.40	133.9	2										1	1									
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.04	17.6	20							1	2	3	2	5	4	3							
TOTAL	2.63	629.3	427				1	1	1	7	21	30	123	133	70	19	6	5	1	1			

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	16.7	27							1	3	5	4	3			4	2	1				
1 TO 2	0.25	37.4	77							2	7	22	26	13	2		2						
2 TO 5	1.23	257.0	205				1	1	1	2	10	24	89	90	60	9		3		1			
5 TO 10	0.59	165.0	16							1	1	4	7	1	2								
10 TO 15	0.40	133.9	2										1	1									
15 TO 20	0.44	150.5	0																				
20 TO 25	0.71	201.5	2																				
25 TO 30	0.61	259.0	1																				
30 TO 35	0.59	255.1	0																				
ABOVE 35	10.05	8312.4	39							1	2	3	2	5	4	3							
TOTAL	23.00	9079.0	450				1	1	1	7	21	30	123	133	70	19	6	5	1	1			



TABLE D13a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMHORF AFB, ALASKA  
AND  
DOVER AFB, DELAWARE

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	2.10	773.0	100																				
20 TO 25	2.16	850.0	82																				
25 TO 30	2.90	1233.3	20																				
30 TO 35	41.75	10100.0	74																				
ABOVE 35	99.45	43949.0	154																				
TOTAL	148.44	64919.5	430																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.01	151.7	210																				
1 TO 2	2.53	427.0	302							2	4	30	80	116	36	13	4						
2 TO 5	2.14	573.0	446																				
5 TO 10	1.56	465.0	113																				
10 TO 15	1.63	545.0	30																				
15 TO 20	3.33	8.5	11																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.90	2167.0	1129																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	1.01	151.7	210							1			4	3	45	95	44	24	9				
1 TO 2	2.53	427.0	302								2	4	30	80	116	36	13	4		1	3		
2 TO 5	2.14	573.0	446										14	44	104	170	57	30	13	5		1	
5 TO 10	1.56	465.0	113									1	11	44	43	11	2	1					
10 TO 15	1.63	545.0	30								1	1	3	14	12	9	1	1					
15 TO 20	2.21	781.5	111							1	1	3	13	35	42	8	6		1				1
20 TO 25	2.16	850.0	82								2	2	3	11	18	9							
25 TO 30	2.90	1233.3	20										1	7	15	5							
30 TO 35	41.75	10100.0	74										3	29	36	6							
ABOVE 35	99.45	43949.0	154										3	58	84	4	2	2					
TOTAL	157.34	67003.3	1567							1	6	10	29	152	435	621	105	69	31	7	3	1	1

TABLE D13b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMHORF AFB, ALASKA  
AND  
DOVER AFB, DELAWARE  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	6.65	239.5	33																				
20 TO 25	6.00	350.5	49																				
25 TO 30	1.40	603.7	23																				
30 TO 35	15.25	6703.0	0																				
ABOVE 35	46.00	26330.4	40																				
TOTAL	64.29	20436.9	154																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.26	39.3	50																				
1 TO 2	0.60	113.3	52																				
2 TO 5	1.10	282.3	220																				
5 TO 10	0.55	170.1	34																				
10 TO 15	0.57	193.0	22																				
15 TO 20	0.05	8.5	11																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	3.19	607.3	300																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	3.26	39.3	50									2	13	6	0	0	7	2	1	2			
1 TO 2	3.60	113.3	52									9	12	10	10	10	2						
2 TO 5	1.10	282.3	200									4	21	96	97	25	10	7	1				
5 TO 10	0.55	170.1	34										1	13	10	2							
10 TO 15	0.57	193.0	22										1	1	0	3							
15 TO 20	6.60	240.0	44								1	1	1	0	10	16			1				1
20 TO 25	0.09	350.5	49										1	9	35	6							
25 TO 30	1.40	603.7	23										1	9	13	4							
30 TO 35	15.25	6703.0	0											5	4								
ABOVE 35	46.00	26330.4	40							1				10	24	1	2	2					
TOTAL	67.60	29244.2	543							3	2	0	93	133	239	63	24	12	3	2			1



### NON-STOP® CONDITIONS

### STORM CONDITIONS

### STORM PLUS NON-STORM

TABLE D134  
DERIVED VERTICAL GUST VELOCITY  
ONE MUTE BETWEEN  
WHEAT AFB, ALASKA  
AND  
WPA AFB, DELAWARE  
FOR THE  
AUTUMN SEASON

### NON-STURM CONDITIONS

### STORM CONDITIONS

**STOMP PLUS W20--STONN**

353



TABLE D13a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
DOVER AFB, DELAWARE  
FOR THE  
MONTH OF APRIL

NON-STORM CONDITIONS																								
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.	0.	0																					
1 TO 2	0.	0.	0																					
2 TO 5	0.	0.	0																					
5 TO 10	0.	0.	0																					
10 TO 15	0.	0.	0																					
15 TO 20	0.36	150.9	5											3	2									
20 TO 25	0.45	176.2	47										1	4	34	6	2							
25 TO 30	0.95	411.1	13											1	10	2								
30 TO 35	0.65	304.0	4												4									
ABOVE 35	21.71	9711.6	20											3	17									
TOTAL	32.10	14276.6	69										1	11	67	8	2							

				STORM CONDITIONS																			
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.16	25.6	27									1	7	1	6	4	4	1					
1 TO 2	0.21	37.7	19									1	3	3	7	5	1		2				
2 TO 5	0.65	161.3	32										3	7	20		2						
5 TO 10	0.27	83.4	8										1	2	4	1							
10 TO 15	0.27	92.2	1											1									
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.56	399.9	87						1		1	14	14	37	10	7	1		2				

				STORM PLUS NON-STORM																			
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.16	25.6	27								1	7	1	6	4		1						
1 TO 2	0.21	37.7	19									3	3	7	5	1							
2 TO 5	0.65	161.0	32									3	7	20		2							
5 TO 10	0.27	83.4	8									1	2	4	1								
10 TO 15	0.27	92.2	1										1										
15 TO 20	0.36	130.9	5											2									
20 TO 25	0.45	176.2	47									1	4	36	6	2							
25 TO 30	0.95	411.1	13										1	10	2								
30 TO 35	0.65	304.0	4												4								
ABOVE 35	21.71	9711.6	20											3	17								
TOTAL	33.67	14676.5	176						1		1	15	25	104	10	9	1			2			

TABLE D13b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
DOVER AFB, DELAWARE  
FOR THE  
MONTH OF MAY

				NON-STORM CONDITIONS																			
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.36	150.9	20																				
20 TO 25	0.45	176.2	2																				
25 TO 30	0.46	192.6	10																				
30 TO 35	0.60	2697.1	5																				
ABOVE 35	24.30	10027.0	20																				
TOTAL	32.19	10160.3	65																				

				STORM CONDITIONS																			
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.39	15.0	23																				
1 TO 2	0.46	79.6	33																				
2 TO 5	0.45	121.3	100																				
5 TO 10	0.39	86.6	26																				
10 TO 15	0.30	101.6	21																				
15 TO 20	0.3	8.5	11																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.63	497.4	302																				

				STORM PLUS NON-STORM																			
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.39	15.0	23								1	6	9	25	2	4	3	1	1				
1 TO 2	0.46	79.6	33									6	9	11	9	1	1	1					
2 TO 5	0.45	121.3	100								4	10	40	77	25	0	7	1					
5 TO 10	0.39	86.6	26										11	16	1								
10 TO 15	0.30	101.6	21								1	1	1	8	3								
15 TO 20	0.32	117.0	30							1	1	1	6	11	12	4	1		1				1
20 TO 25	0.45	176.2	2											1									
25 TO 30	0.46	192.6	10										1	4	2								
30 TO 35	0.60	2697.1	5										5										
ABOVE 35	24.30	10027.0	20										7	7	1	2	2						
TOTAL	36.02	10967.7	367								2	2	7	30	100	135	45	15	11	3			1



TABLE D15g  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
DOVER AFB, DELAWARE  
FOR THE  
MONTH OF JUNE

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.30	176.3	9																				
20 TO 25	0.32	207.4	13																				
25 TO 30	0.30	250.7	4																				
30 TO 35	12.34	5420.6	3																				
ABOVE 35	15.00	7064.9	34																				
TOTAL	32.02	13119.0	59																				

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	GSE DISTRIBUTION (FT./SEC.)																			
(1000 FT.)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.30	97.5	80																				
1 TO 2	1.31	167.4	136																				
2 TO 5	0.44	122.4	146																				
5 TO 10	0.30	91.7	13																				
10 TO 15	0.36	122.9	1																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	2.30	561.9	354																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.30	97.5	80									2	7	27	26	13	7						
1 TO 2	1.31	167.4	136									10	17	49	7	2	1						
2 TO 5	0.44	122.4	146							1	2	8	12	33	36	21	12	5	1		1		
5 TO 10	0.30	91.7	13									3	3	4	1	1	1						
10 TO 15	0.36	122.9	1										1										
15 TO 20	0.30	176.3	9										1	3		1							
20 TO 25	0.32	207.4	13									1	4	7	1								
25 TO 30	0.30	250.7	4											2									
30 TO 35	12.34	5420.6	3											3									
ABOVE 35	15.00	7064.9	34										1	20	12	1							
TOTAL	32.33	13601.7	413							1	2	10	34	131	199	64	23	11	1		1		

TABLE D15h  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
DOVER AFB, DELAWARE  
FOR THE  
MONTH OF JULY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.41	149.2	23								1	3	5	11	1	2							
20 TO 25	0.27	103.9	20							2	2	1	2	6	2	4		1					
25 TO 30	0.39	163.3	1																				
30 TO 35	4.00	2670.6	26											4	10	3	1						
ABOVE 35	16.77	7216.1	41										1	11	20	1							
TOTAL	22.64	9711.1	111							2	3	5	22	63	0	7	1						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	20.0	20																				
1 TO 2	0.27	40.4	40																				
2 TO 5	0.25	71.0	0																				
5 TO 10	0.27	63.0	3																				
10 TO 15	0.34	113.0	10																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.31	342.9	90																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	GSE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	20.0	20																				
1 TO 2	0.47	60.4	40										3	9	9	1	1						
2 TO 5	0.25	71.0	0								1	1	10	14	7	6	1						
5 TO 10	0.27	60.0	3										2	5		1							
10 TO 15	0.34	113.0	10									1	1	1									
15 TO 20	0.41	149.2	23								1	3	3	2	2	1	1						
20 TO 25	0.27	103.9	20								2	2	1	2	6	2	4	1					
25 TO 30	0.39	163.3	1																				
30 TO 35	4.00	2670.6	26										4	10	3								
ABOVE 35	16.77	7216.1	41										1	11	20	1							
TOTAL	23.05	10094.0	291							2	4	13	41	94	26	16	4		1				



TABLE DIM  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
DOVER AFB, DELAWARE  
FOR THE  
MONTH OF AUGUST

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.41	133.7	37																				
20 TO 25	0.20	70.0	0																				
25 TO 30	0.20	117.3	0																				
30 TO 35	0.07	3703.9	39																				
ABOVE 35	0.10	2000.0	20																				
TOTAL	15.04	8759.6	120																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.13	10.4	46																				
1 TO 2	0.24	41.0	90								1	2	7	25	29	12	3						
2 TO 5	0.20	56.4	72								2	11	14	14	10	11	7	1	3				
5 TO 10	0.20	73.3	63								1	6	27	20	9	1							
10 TO 15	0.17	53.2	5									1	2	2									
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.33	243.1	276					1	2	3	5	42	75	77	44	20	4	3					

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.13	10.4	46																				
1 TO 2	0.24	41.0	90							1	2	17	25	20	12	3	9	1					
2 TO 5	0.20	56.4	72							2	11	14	10	11	7	1	3						
5 TO 10	0.20	73.3	63							1	6	27	20	0	1								
10 TO 15	0.17	53.2	5								1	2	2										
15 TO 20	0.41	133.7	37							1	4	14	14	3	2								
20 TO 25	0.20	70.0	0																				
25 TO 30	0.20	117.3	0																				
30 TO 35	0.07	3703.9	39									2	16	14	3								
ABOVE 35	0.10	2000.0	20										13	14	1								
TOTAL	16.09	7002.6	376									6	40	110	110	51	22	4	3				

TABLE DIM  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
DOVER AFB, DELAWARE  
FOR THE  
MONTH OF SEPTEMBER

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.21	76.3	2											1	1								
20 TO 25	0.20	111.0	0																				
25 TO 30	0.23	90.3	0																				
30 TO 35	0.20	121.9	1																				
ABOVE 35	14.62	6482.6	11											1	1	6							
TOTAL	15.62	6888.2	14											1	4	7							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	7.0	6											1	2	2	1						
1 TO 2	0.34	56.0	14																				
2 TO 5	0.14	41.9	0								1	1	2	4	6								
5 TO 10	0.14	44.1	0																				
10 TO 15	0.10	62.1	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.86	212.6	20								1	1	3	6	6	1							

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	7.0	6																				
1 TO 2	0.34	56.0	14																				
2 TO 5	0.14	41.9	0																				
5 TO 10	0.14	44.1	0																				
10 TO 15	0.10	62.1	0																				
15 TO 20	0.21	76.3	2																				
20 TO 25	0.20	111.0	0																				
25 TO 30	0.23	90.3	0																				
30 TO 35	0.20	121.9	1																				
ABOVE 35	14.62	6482.6	11																				
TOTAL	16.49	7103.8	36																				



TABLE D146  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
CHARLESTON AFB/MUNI, SOUTH CAROLINA

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.79	209.9	0											2	6	1							
20 TO 25	0.69	200.9	0																				
25 TO 30	0.92	302.0	0																				
30 TO 35	14.29	6114.9	15											3	11	1							
ABOVE 35	37.44	10337.0	134											6	45	75	8						
TOTAL	55.43	23050.3	150											6	90	92	9	1					

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	26.9	20										2	3	6	6	5	6					
1 TO 2	0.40	81.3	20										4	8	11	4	1						
2 TO 5	0.35	89.5	41										3	7	21	9	1						
5 TO 10	0.48	142.0	10											8	10								
10 TO 15	0.46	151.9	16										1	3	10	2							
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.96	492.5	131											2	11	32	50	20	8				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.10	26.9	20										2	3	6	6	5	6						
1 TO 2	0.49	81.3	20										4	4	11	4	1							
2 TO 5	0.35	89.5	41										3	7	21	9	1							
5 TO 10	0.48	142.0	10											8	10									
10 TO 15	0.46	151.9	16										1	3	10	2								
15 TO 20	0.79	209.9	0											2	6	1								
20 TO 25	0.69	200.9	0																					
25 TO 30	0.92	302.0	0																					
30 TO 35	14.29	6114.9	15											3	11									
ABOVE 35	37.44	10337.0	134											6	45	75	8							
TOTAL	55.79	23542.7	200											2	17	82	150	29	9					

TABLE D146  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
CHARLESTON AFB/MUNI, SOUTH CAROLINA  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.32	114.0	0																				
20 TO 25	0.31	120.0	0																				
25 TO 30	0.37	155.6	0																				
30 TO 35	11.97	5190.1	6																				
ABOVE 35	13.95	6125.6	55																				
TOTAL	26.92	11726.1	61											2	25	26	2						
														2	25	32	2						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	16.0	24									2	3	6	5	5	3						
1 TO 2	0.21	35.2	11										2	2	4								
2 TO 5	0.20	51.7	10										1	3	9	5	1						
5 TO 10	0.27	80.2	8											4	4								
10 TO 15	0.22	73.5	5											2	3								
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.31	256.6	66									2	6	17	27	13	4						

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	16.0	24									2	3	6	5	5	3						
1 TO 2	0.21	35.2	11									2	2	4									
2 TO 5	0.20	51.7	10									1	3	9	5	1							
5 TO 10	0.27	80.2	8										4	4									
10 TO 15	0.22	73.5	5										2	3									
15 TO 20	0.32	114.0	0																				
20 TO 25	0.31	120.0	0																				
25 TO 30	0.37	155.6	0																				
30 TO 35	11.97	5190.1	6											6									
ABOVE 35	13.95	6125.6	55									2	2	25	26	2							
TOTAL	27.93	11962.7	127								2	8	47	59	12	4							



TABLE D164  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMHORF AFB, ALASKA  
AND  
CHARLESTON AFB/MUNI, SOUTH CAROLINA  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	0.0	0																				
1 TO 2	0.07	0.0	0																				
2 TO 5	0.07	0.0	0																				
5 TO 10	0.07	0.0	0																				
10 TO 15	0.07	0.0	0																				
15 TO 20	0.07	171.9	9											2	6	1							
20 TO 25	0.07	140.1	0																				
25 TO 30	0.07	107.1	0																				
30 TO 35	0.07	924.0	9											3	5		1						
ABOVE 35	23.49	9912.2	79											4	20	49	6						
TOTAL	26.91	11344.2	97											4	25	60	7	1					

STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	11.0	4											1		3							
1 TO 2	0.07	40.1	17										2	6	5	4							
2 TO 5	0.15	37.0	23										2	4	12	4	1						
5 TO 10	0.21	62.6	13											4	6								
10 TO 15	0.24	70.4	11										1	1	7	2							
15 TO 20	0.07	171.9	9																				
20 TO 25	0.07	140.1	0																				
25 TO 30	0.07	107.1	0																				
30 TO 35	0.07	924.0	9																				
ABOVE 35	0.07	9912.2	79																				
TOTAL	0.95	235.9	65										9	15	31	10	4						

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	11.0	4																				
1 TO 2	0.07	40.1	17										2	6	5	4							
2 TO 5	0.15	37.0	23										2	4	12	4	1						
5 TO 10	0.21	62.6	13											4	6								
10 TO 15	0.24	70.4	11										1	1	7	2							
15 TO 20	0.07	171.9	9											2	6	1							
20 TO 25	0.07	140.1	0																				
25 TO 30	0.07	107.1	0																				
30 TO 35	0.12	924.0	9											3	5		1						
ABOVE 35	23.49	9912.2	79											4	20	49	6						
TOTAL	27.07	11957.1	162											9	42	91	17	5					

TABLE D164  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMHORF AFB, ALASKA  
AND  
CHARLESTON AFB/MUNI, SOUTH CAROLINA  
FOR THE  
MONTH OF APRIL

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	0.0	0																				
1 TO 2	0.07	0.0	0																				
2 TO 5	0.07	0.0	0																				
5 TO 10	0.07	0.0	0																				
10 TO 15	0.07	0.0	0																				
15 TO 20	0.07	171.9	9																				
20 TO 25	0.07	140.1	0																				
25 TO 30	0.07	107.1	0																				
30 TO 35	0.07	924.0	9																				
ABOVE 35	5.72	2496.6	54											2	25	25	2						
TOTAL	14.02	6381.4	63											2	25	31	2						

STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	12.2	5																				
1 TO 2	0.17	20.2	1																				
2 TO 5	0.04	15.0	1																				
5 TO 10	0.10	46.0	0																				
10 TO 15	0.11	37.9	0																				
15 TO 20	0.07	171.9	9																				
20 TO 25	0.07	140.1	0																				
25 TO 30	0.07	107.1	0																				
30 TO 35	0.07	924.0	9																				
ABOVE 35	0.07	9912.2	79																				
TOTAL	0.56	137.2	7									1	1	1	2	1	1						

STORM PLUS NON-STORM																							
ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	12.2	5																				
1 TO 2	0.07	20.2	1																				
2 TO 5	0.04	15.0	1																				
5 TO 10	0.10	46.0	0																				
10 TO 15	0.11	37.9	0																				
15 TO 20	0.10	171.9	9																				
20 TO 25	0.07	140.1	0																				
25 TO 30	0.07	107.1	0																				
30 TO 35	0.07	924.0	9																				
ABOVE 35	5.72	2496.6	54											2	25	25	2						
TOTAL	15.30	6510.4	67											1	3	24	33	3	1				



TABLE D14a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
CHARLESTON AFB/FORT, SOUTH CAROLINA  
FOR THE  
MONTH OF MAY

NON-STORM CONDITIONS																								
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.0	0.0	0																					
1 TO 2	0.0	0.0	0																					
2 TO 5	0.0	0.0	0																					
5 TO 10	0.0	0.0	0																					
10 TO 15	0.0	0.0	0																					
15 TO 20	0.16	56.0	3																					
20 TO 25	0.17	67.2	0																					
25 TO 30	0.15	64.4	0																					
30 TO 35	0.40	1307.6	0																					
ABOVE 35	0.22	3629.0	1																					
TOTAL	12.10	5324.7	1																					

STORM CONDITIONS																								
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.03	5.0	10									1	2	5	5	4	2							
1 TO 2	0.04	7.0	10										2	2	5	5								
2 TO 5	0.15	36.7	17										1	3	8	5	1							
5 TO 10	0.12	34.2	0												4	4								
10 TO 15	0.11	35.7	5											2	3									
15 TO 20	0.	0.	0																					
20 TO 25	0.	0.	0																					
25 TO 30	0.	0.	0																					
30 TO 35	0.	0.	0																					
ABOVE 35	0.	0.	0																					
TOTAL	0.44	119.4	34									1	5	14	25	9	3							

STORM PLUS NON-STORM																								
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.03	5.0	10																					
1 TO 2	0.04	7.0	10																					
2 TO 5	0.15	36.7	17																					
5 TO 10	0.12	34.2	8																					
10 TO 15	0.11	35.7	5																					
15 TO 20	0.16	56.0	3																					
20 TO 25	0.17	67.2	0																					
25 TO 30	0.15	64.4	0																					
30 TO 35	0.40	1307.6	0																					
ABOVE 35	0.22	3629.0	1																					
TOTAL	12.34	5444.1	40																					

TABLE D14b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
CHARLESTON AFB/FORT, SOUTH CAROLINA  
FOR THE  
MONTH OF JUNE

NON-STORM CONDITIONS																								
			GUST DISTRIBUTION (FT./SEC.)																					
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.	0.	0																					
1 TO 2	0.	0.	0																					
2 TO 5	0.	0.	0																					
5 TO 10	0.	0.	0																					
10 TO 15	0.	0.	0																					
15 TO 20	0.32	109.5	0																					
20 TO 25	0.17	64.4	0																					
25 TO 30	0.23	80.6	0																					
30 TO 35	0.20	62.5	0																					
ABOVE 35	13.44	5962.4	76																					
TOTAL	14.36	5954.9	76																					

STORM CONDITIONS																								
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.04	6.0	0																					
1 TO 2	0.14	22.2	0																					
2 TO 5	0.37	10.1	12																					
5 TO 10	0.11	32.3	17																					
10 TO 15	0.11	35.7	11																					
15 TO 20	0.	0.	0																					
20 TO 25	0.	0.	0																					
25 TO 30	0.	0.	0																					
30 TO 35	0.	0.	0																					
ABOVE 35	0.	0.	0																					
TOTAL	0.40	114.7	33																					

STORM PLUS NON-STORM																								
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.04	6.0	0																					
1 TO 2	0.14	22.2	0																					
2 TO 5	0.37	104.1	12																					
5 TO 10	0.11	32.3	10																					
10 TO 15	0.11	35.7	11																					
15 TO 20	0.30	109.5	0																					
20 TO 25	0.17	64.4	-																					
25 TO 30	0.23	80.6	0																					
30 TO 35	0.20	62.5	0																					
ABOVE 35	13.44	5962.4	76																					
TOTAL	14.03	6449.6	107																					



TABLE D14  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA

AND  
CHARLESTON AFB/WHI, SOUTH CAROLINA  
FOR THE  
MONTH OF JULY

NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	C.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.32	9.1	0																				
20 TO 25	0.05	19.3	0																				
25 TO 30	0.35	21.0	0																				
30 TO 35	1.75	772.1	0																				
ABOVE 35	1.31	549.0	1											1	4	1							
TOTAL	3.19	1391.4	1											4	4	1							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	3.32	2.5	1											1									
1 TO 2	0.31	1.4	0																				
2 TO 5	0.32	6.7	0											7	1								
5 TO 10	0.92	7.0	0																				
10 TO 15	0.03	11.3	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	3.	0																				
TOTAL	6.11	29.7	1											8	1								

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	3.32	2.5	1																				
1 TO 2	0.31	1.4	0																				
2 TO 5	0.32	6.7	0																				
5 TO 10	0.92	7.0	0																				
10 TO 15	0.03	11.3	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	1.75	772.1	0																				
ABOVE 35	1.31	549.0	1																				
TOTAL	6.33	1421.1	1																				

TABLE D14B  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA

AND  
CHARLESTON AFB/WHI, SOUTH CAROLINA  
FOR THE  
MONTH OF AUGUST

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	C.	0.	0																				
1 TO 2	C.	0.	0																				
2 TO 5	C.	0.	0																				
5 TO 10	C.	0.	0																				
10 TO 15	C.	0.	0																				
15 TO 20	0.15	53.3	0											2	6	1							
20 TO 25	0.17	64.0	0																				
25 TO 30	0.17	69.6	0																				
30 TO 35	0.17	70.2	1																				
ABOVE 35	0.72	3763.0	2												1	1	1						
TOTAL	0.37	4010.0	12											1	0	1							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	2.1	3																				
1 TO 2	0.13	22.5	17																				
2 TO 5	0.35	13.0	3																				
5 TO 10	0.37	22.5	0																				
10 TO 15	0.15	31.4	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.37	91.5	23											3	6	6	6	6					

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	2.1	3																				
1 TO 2	0.13	22.5	17																				
2 TO 5	0.35	13.0	3																				
5 TO 10	0.37	22.5	0																				
10 TO 15	0.10	31.4	0																				
15 TO 20	0.15	53.3	0																				
20 TO 25	0.17	64.0	0																				
25 TO 30	0.17	69.6	0																				
30 TO 35	0.17	70.2	1																				
ABOVE 35	0.72	3763.0	2																				
TOTAL	0.73	4100.4	35																				



TABLE D18a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMHORF AFB, ALASKA  
AND  
MCUIRE AFB, NEW JERSEY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.11	17.1	22																					
1 TO 2	0.60	96.6	33																					
2 TO 5	0.19	43.9	20																					
5 TO 10	0.20	70.3	17																					
10 TO 15	0.32	109.5	5																					
15 TO 20	0.40	140.0	39																					
20 TO 25	0.32	125.5	0																					
25 TO 30	0.30	127.3	0																					
30 TO 35	0.42	2706.1	66																					
ABOVE 35	15.55	6700.6	20																					
TOTAL	22.90	9955.6	133																					

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	17.1	22																				
1 TO 2	0.60	96.6	33																				
2 TO 5	0.19	43.9	20																				
5 TO 10	0.20	70.0	17																				
10 TO 15	0.32	109.5	5																				
15 TO 20	0.40	140.0	39																				
20 TO 25	0.32	125.5	0																				
25 TO 30	0.30	127.3	0																				
30 TO 35	0.42	2706.1	66																				
ABOVE 35	15.55	6700.6	20																				
TOTAL	1.51	346.1	97																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	17.1	22																				
1 TO 2	0.60	96.6	33																				
2 TO 5	0.19	43.9	20																				
5 TO 10	0.20	70.3	17																				
10 TO 15	0.32	109.5	5																				
15 TO 20	0.40	140.3	39																				
20 TO 25	0.32	125.5	0																				
25 TO 30	0.30	127.3	0																				
30 TO 35	0.42	2706.1	66																				
ABOVE 35	15.55	6700.6	20																				
TOTAL	24.49	10301.7	230																				

TABLE D18b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMHORF AFB, ALASKA  
AND  
MCUIRE AFB, NEW JERSEY  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	6.40	140.0	39								2	2	3	6	8	6	5	5	2				
20 TO 25	3.12	125.5	0																				
25 TO 30	0.30	127.3	0																				
30 TO 35	6.42	2706.1	66									1	3	20	35	6	1						
ABOVE 35	15.55	6700.6	20											0	10	4							
TOTAL	22.90	9955.6	133								2	3	6	32	61	16	6	5	2				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	17.1	22																				
1 TO 2	0.60	96.6	33																				
2 TO 5	0.19	43.9	20																				
5 TO 10	0.20	70.3	17																				
10 TO 15	0.32	109.5	5																				
15 TO 20	0.40	140.0	39																				
20 TO 25	0.32	125.5	0																				
25 TO 30	0.30	127.3	0																				
30 TO 35	0.42	2706.1	66																				
ABOVE 35	0.40	270.6	20																				
TOTAL	1.51	346.1	97																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	17.1	22							1			4	3	6	7	1						
1 TO 2	0.60	96.6	33										2	6	12	8							
2 TO 5	0.19	43.9	20							1			3	7	3	5	1						
5 TO 10	0.20	70.6	17								1			5	6	5							
10 TO 15	0.32	109.5	5												5								
15 TO 20	0.40	140.0	39								2	2	3	6	8	6	5	5	2				
20 TO 25	0.32	125.5	0																				
25 TO 30	0.30	127.3	0																				
30 TO 35	0.42	2706.1	66									1	3	20	30	6	1						
ABOVE 35	15.55	6700.6	20												4	10	4						
TOTAL	24.49	10301.7	230						2	3	4	19	53	93	41	11	6	2					



TABLE DIS3  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
FLAMINGO AFB, ALASKA  
AND  
MCQUEEN AFB, NEW JERSEY  
FOR THE  
MONTH OF JULY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.12	42.5	39								2	2	3	6	8	6	5	5	2				
20 TO 25	0.39	36.0	0																				
25 TO 30	0.09	30.3	0																				
30 TO 35	2.92	1248.6	52								1	3	17	25	5	1							
ABOVE 35	4.49	1899.7	24											6	14	4							
TOTAL	7.71	3269.0	115								2	5	6	29	67	15	6	5	2				

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.04	6.7	13																				
1 TO 2	0.14	23.8	17																				
2 TO 5	0.24	13.6	11																				
5 TO 10	0.07	22.2	17																				
10 TO 15	0.10	32.0	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.40	96.1	30																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.04	6.7	13																				
1 TO 2	0.14	23.8	17																				
2 TO 5	0.24	13.6	11																				
5 TO 10	0.07	22.2	17																				
10 TO 15	0.10	32.0	0																				
15 TO 20	0.12	42.5	39																				
20 TO 25	0.09	36.0	0																				
25 TO 30	0.09	30.3	0																				
30 TO 35	2.92	1248.6	52																				
ABOVE 35	4.49	1899.7	24																				
TOTAL	0.11	3361.1	173																				

TABLE DIS4  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
FLAMINGO AFB, ALASKA  
AND  
MCQUEEN AFB, NEW JERSEY  
FOR THE  
MONTH OF AUGUST

NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.20	135.5	0																				
20 TO 25	0.22	89.5	0																				
25 TO 30	0.21	89.1	0																				
30 TO 35	3.50	1537.5	14																				
ABOVE 35	11.36	4869.3	4											3	10	1							
TOTAL	15.27	6990.6	18											3	14	1							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.37	13.4	9						1			1	3	5	7.5	10							
1 TO 2	0.46	72.8	16									2	1	1	3	1							
2 TO 5	0.14	33.3	9						1			1	2	2	2	1	1						
5 TO 10	0.21	56.8	0																				
10 TO 15	0.22	76.7	5																				
15 TO 20	0.	0.	0											5									
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.11	25.2	39						1	1		4	7	14	7	4	1						

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.37	13.4	9																				
1 TO 2	0.46	72.8	16																				
2 TO 5	0.14	33.3	9																				
5 TO 10	0.21	56.8	0																				
10 TO 15	0.22	76.7	5																				
15 TO 20	0.20	105.5	0																				
20 TO 25	0.22	89.5	0																				
25 TO 30	0.21	89.1	0																				
30 TO 35	3.50	1537.5	14																				
ABOVE 35	11.06	4869.3	4																				
TOTAL	16.30	6990.6	37																				



TABLE DIA  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
LAURENCE G. HANSCOM FIELD, MASS.

NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																							
(1000S)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35				
BELOW 1	0.	0.	0																								
1 TO 2	0.	0.	0																								
2 TO 5	0.	0.	0																								
5 TO 10	0.	0.	0																								
10 TO 15	0.	0.	0																								
15 TO 20	0.49	176.9	1																								
20 TO 25	0.37	147.1	0																								
25 TO 30	1.37	463.9	0																								
30 TO 35	10.00	4532.0	63																								
ABOVE 35	10.97	4015.9	22																								
TOTAL	23.62	10139.0	86																								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.30	12.0	4																				
1 TO 2	0.21	36.9	17																				
2 TO 5	0.13	32.0	47																				
5 TO 10	0.23	69.9	41																				
10 TO 15	0.23	61.1	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.90	231.0	117																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.30	12.0	4																				
1 TO 2	0.21	36.9	17																				
2 TO 5	0.13	32.0	47																				
5 TO 10	0.23	69.9	41																				
10 TO 15	0.23	61.1	0																				
15 TO 20	0.49	176.9	1																				
20 TO 25	0.37	147.1	0																				
25 TO 30	1.37	463.9	0																				
30 TO 35	10.00	4532.0	63											1	16	41	5						
ABOVE 35	10.97	4015.9	22												5	17							
TOTAL	24.77	13348.9	203											1	21	110	22	7					

TABLE DIA  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
LAURENCE G. HANSCOM FIELD, MASS.  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.49	176.9	1																				
20 TO 25	0.37	147.1	0																				
25 TO 30	1.37	463.9	0																				
30 TO 35	10.00	4532.0	63											1	16	41	5						
ABOVE 35	10.97	4015.9	22												5	17							
TOTAL	23.62	10139.0	86											1	21	59	5						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																							
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35				
BELOW 1	0.30	12.0	4																								
1 TO 2	0.21	36.9	17																								
2 TO 5	0.13	32.0	47																								
5 TO 10	0.23	69.9	41																								
10 TO 15	0.23	61.1	0																								
15 TO 20	0.	0.	0																								
20 TO 25	0.	0.	0																								
25 TO 30	0.	0.	0																								
30 TO 35	0.	0.	0																								
ABOVE 35	0.	0.	0																								
TOTAL	0.90	231.0	117																								

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.30	12.0	4																					
1 TO 2	0.21	36.9	17																					
2 TO 5	0.13	32.0	47																					
5 TO 10	0.23	69.9	41																					
10 TO 15	0.23	61.1	0																					
15 TO 20	0.49	176.9	1																					
20 TO 25	0.37	147.1	0																					
25 TO 30	1.37	463.9	0																					
30 TO 35	10.00	4532.0	63											1	16	41	5							
ABOVE 35	10.97	4015.9	22												5	17								
TOTAL	24.77	10348.9	203											1	21	110	22	7						



TABLE D164  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELLENBORF AFB, ALASKA  
AND  
LAURENCE G. HANSEN FIELD, MASS.  
FOR THE  
MONTH OF AUGUST

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.	0.	0																					
1 TO 2	0.	0.	0																					
2 TO 5	0.	0.	0																					
5 TO 10	0.	0.	0																					
10 TO 15	0.	0.	0																					
15 TO 20	0.49	174.5	1																					
20 TO 25	0.37	147.1	0																					
25 TO 30	1.07	443.9	0																					
30 TO 35	10.90	4582.0	63										1	16	41	5								
ABOVE 35	10.97	4015.5	22											5	17									
TOTAL	23.02	10139.0	86										1	21	59	5								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	12.0	4											3	1								
1 TO 2	0.21	36.5	17									4	2	5	5	1							
2 TO 5	0.13	32.0	47					1	1	1	1	7	5	17	10	4							
5 TO 10	0.23	69.9	41									1	7	22	9	2							
10 TO 15	0.25	81.1	8										2	4	2								
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.90	231.4	117					1	1	1	1	12	16	51	27	7							

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	12.0	4											3	1								
1 TO 2	0.21	36.5	17									4	2	5	5	1							
2 TO 5	0.13	32.0	47					1	1	1	1	7	5	17	10	4							
5 TO 10	0.23	69.9	41									1	7	22	9	2							
10 TO 15	0.25	81.1	8										2	4	2								
15 TO 20	0.49	174.5	1																				
20 TO 25	0.37	147.1	0																				
25 TO 30	1.07	443.9	0																				
30 TO 35	10.90	4532.0	63									1	16	41	5								
ABOVE 35	10.97	4015.5	22										5	17									
TOTAL	24.72	10360.5	203					1	1	1	1	13	37	110	32	7							



TABLE D17  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
YOKOTA AB, JAPAN

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	2.71	962.4	30																				
20 TO 25	3.00	1491.0	49																				
25 TO 30	9.27	3964.4	10																				
30 TO 35	92.34	39963.4	181																				
ABOVE 35	136.31	60603.5	854																				
TOTAL	244.04	106961.7	1132																				

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	134.5	140																				
1 TO 2	1.62	266.2	270																				
2 TO 5	3.69	776.3	639																				
5 TO 10	2.76	811.0	215																				
10 TO 15	2.40	833.9	49																				
15 TO 20	0.12	44.3	0																				
20 TO 25	0.45	109.0	0																				
25 TO 30	2.30	1073.1	11																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	14.40	4131.0	1332																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	134.5	140																				
1 TO 2	1.62	266.2	270																				
2 TO 5	3.69	776.3	639																				
5 TO 10	2.76	811.0	215																				
10 TO 15	2.40	833.9	49																				
15 TO 20	2.03	1026.7	30																				
20 TO 25	6.25	1679.9	45																				
25 TO 30	11.77	5017.3	21																				
30 TO 35	92.34	39963.4	101																				
ABOVE 35	136.31	60603.5	854																				
TOTAL	259.32	111902.7	2664																				

TABLE D17  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.19	67.9	2																				
20 TO 25	3.23	91.6	1																				
25 TO 30	3.45	106.5	0																				
30 TO 35	5.66	2320.7	19																				
ABOVE 35	7.76	3453.6	1																				
TOTAL	14.20	6200.3	23																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.37	11.9	3																				
1 TO 2	0.09	11.	0																				
2 TO 5	0.31	64.7	66																				
5 TO 10	0.16	67.6	9																				
10 TO 15	0.12	62.3	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.76	102.0	95																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	11.9	3																				
1 TO 2	0.09	11.9	0																				
2 TO 5	0.31	64.7	66																				
5 TO 10	0.16	67.6	9																				
10 TO 15	0.12	62.3	0																				
15 TO 20	0.19	67.9	2																				
20 TO 25	6.23	91.6	1																				
25 TO 30	0.45	106.5	0																				
30 TO 35	5.66	2320.7	19																				
ABOVE 35	7.76	3453.6	1																				
TOTAL	19.04	6462.3	100																				



TABLE D173  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMHORF AFB, ALASKA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.06	301.7	9																				
20 TO 25	1.60	626.3	29																				
25 TO 30	2.51	1076.2	4																				
30 TO 35	30.22	13224.0	99																				
ABOVE 35	75.51	33553.4	655																				
TOTAL	116.91	48895.6	796																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.31	49.7	45							1													
1 TO 2	1.72	119.3	123									3	16	29	34	24	15	1	1				
2 TO 5	1.94	392.2	330									10	20	92	115	52	10	10	3	3	1	1	
5 TO 10	1.28	347.3	159									1	9	42	60	22	4	1					
10 TO 15	1.03	341.0	31											10	12	8	1						
15 TO 20	0.6	381.7	9																				
20 TO 25	1.60	626.3	29																				
25 TO 30	2.51	1076.2	4																				
30 TO 35	30.22	13224.0	99																				
ABOVE 35	75.51	33553.4	655																				
TOTAL	5.29	1269.4	696																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.31	49.7	45																				
1 TO 2	1.72	119.3	123																				
2 TO 5	1.94	392.2	330																				
5 TO 10	1.28	347.3	159																				
10 TO 15	1.03	341.0	31																				
15 TO 20	1.04	381.7	9																				
20 TO 25	1.60	626.3	29																				
25 TO 30	2.51	1076.2	4																				
30 TO 35	30.22	13224.0	99																				
ABOVE 35	75.51	33553.4	655																				
TOTAL	116.20	59125.0	1492																				

TABLE D174  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMHORF AFB, ALASKA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.31	49.7	45																				
1 TO 2	1.72	119.3	123																				
2 TO 5	1.94	392.2	330																				
5 TO 10	1.28	347.3	159																				
10 TO 15	1.03	341.0	31																				
15 TO 20	1.20	463.2	25																				
20 TO 25	1.77	607.9	19																				
25 TO 30	6.39	2507.0	6																				
30 TO 35	52.08	22760.8	99																				
ABOVE 35	64.70	19623.1	196																				
TOTAL	136.72	44126.8	293																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.31	45.8	45									3	16	29	21	12	7	6	3				
1 TO 2	3.75	125.3	144							1	1	7	24	27	34	35	14	1	1	1			
2 TO 5	1.34	293.9	234																				
5 TO 10	1.21	359.2	42																				
10 TO 15	1.19	462.9	14																				
15 TO 20	3.12	44.3	0																				
20 TO 25	0.65	169.0	0																				
25 TO 30	2.90	1373.1	11																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0												5	6							
TOTAL	7.96	2550.6	537																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.31	49.7	45																				
1 TO 2	1.72	119.3	123																				
2 TO 5	1.34	293.0	234																				
5 TO 10	1.21	350.2	42																				
10 TO 15	1.19	482.9	10																				
15 TO 20	1.40	587.5	25																				
20 TO 25	2.22	686.9	19																				
25 TO 30	0.30	3679.1	17																				
30 TO 35	52.00	22740.6	53																				
ABOVE 35	44.70	19623.1	190																				
TOTAL	114.60	46677.4	830																				



TABLE 2676  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
AUTUMN SEASON  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.10	69.6	2											1	1								
20 TO 25	0.10	75.2	0																				
25 TO 30	0.22	90.7	0																				
30 TO 35	0.70	1007.1	10											2	6	2							
ABOVE 35	0.04	3016.6	0																				
TOTAL	12.02	5699.3	20											0	14	2							

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0										2	0	1	1							
1 TO 2	0.0	0.1	3										2		1								
2 TO 5	0.10	26.6	2											1	1								
5 TO 10	0.12	37.7	5										1	3	1								
10 TO 15	0.16	67.7	1																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	0.47	129.3	16										5	4	4	1							

STORM PLUS NON-STORM

			WIND DISTRIBUTION (FT./SEC.)																				
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.1	1																				
2 TO 5	0.1	26.4	2																				
5 TO 10	1.1	37.7	5																				
10 TO 15	0.1	67.7	2																				
15 TO 20	0.1	69.6	2																				
20 TO 25	0.1	75.2	2																				
25 TO 30	0.2	90.7																					
30 TO 35	0.7	1667.1	10																				
ABOVE 35	0.6	5816.6	8																				
TOTAL	13.90	5827.0	30																				

TABLE 2677  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF JANUARY  
NON-STORM CONDITIONS

ALTITUDE RANGES (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.0	19.6	1											1									
20 TO 25	0.0	29.6	1											1									
25 TO 30	0.0	62.0	3																				
30 TO 35	0.0	193.2	17																				
ABOVE 35	0.0	0	0										0	0	2								
TOTAL	50.1	2044.3	10										0	0	2								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.2	0																				
1 TO 2	0.0	0.1	2.5																				
2 TO 5	0.0	0.3	9.1											1	1								
5 TO 10	0.0	0.74	11.7												4								
10 TO 15	0.0	0.5	10.1																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	0.19	49.9	7							1				1	5								

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.01	0.0	0																				
2 TO 5	0.03	0.1	0																				
5 TO 10	0.06	0.2	0																				
10 TO 15	0.10	0.3	0																				
15 TO 20	0.15	0.4	0																				
20 TO 25	0.20	0.5	0																				
25 TO 30	0.25	0.6	0																				
30 TO 35	0.30	0.7	0																				
ABOVE 35	0.35	0.8	0																				
TOTAL	0.35	2.0	0																				



TABLE D17  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF FEBRUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	..	..	0																				
1 TO 2	..	..	0																				
2 TO 5	..	..	0																				
5 TO 10	..	..	0																				
10 TO 15	..	..	0																				
15 TO 20	6.13	40.3	1											1									
20 TO 25	6.16	62.0	0																				
25 TO 30	6.29	123.7	0																				
30 TO 35	6.93	300.4	2																				
ABOVE 35	7.76	3613.6	1																				
TOTAL	9.27	4236.0	4											1									
														1	3								

STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0									2						1					
1 TO 2	0.0	13.2	5									2			2								
2 TO 5	0.20	55.6	61								1	2	19	29	6	2	1	1					
5 TO 10	0.12	35.9	9																				
10 TO 15	0.08	26.2	0										1	5	3								
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	0.61	136.7	70									1	6	21	34	11	2	1	2				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.07	7.0	3									2											
2 TO 5	0.20	55.6	61									2											
5 TO 10	0.12	35.9	9									2											
10 TO 15	0.08	26.2	0									1	19	29	6	2	1	1					
15 TO 20	0.13	40.3	1									1	5	3									
20 TO 25	0.16	62.0	0																				
25 TO 30	0.29	123.7	0																				
30 TO 35	0.93	300.4	2																				
ABOVE 35	7.76	3613.6	1												2								
TOTAL	9.89	4376.7	82									1	6	22	37	11	2	1	2				

TABLE D17  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF MARCH

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.42	150.9	5																				
20 TO 25	0.71	250.8	5																				
25 TO 30	1.33	470.8	0																				
30 TO 35	1.32	470.8	0																				
ABOVE 35	36.28	15476.0	39																				
TOTAL	40.25	21120.1	139																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.20	69.9	37																				
2 TO 5	1.31	470.8	157																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.42	150.9	10																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	2.33	552.0	303																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.20	69.9	37																				
2 TO 5	1.31	470.8	157																				
5 TO 10	0.00	0.0	0																				
10 TO 15	0.42	150.9	10																				
15 TO 20	0.00	0.0	0																				
20 TO 25	0.01	353.0	5																				
25 TO 30	0.33	972.0	5																				
30 TO 35	0.00	0.0	0																				
ABOVE 35	34.28	21674.0	30																				
TOTAL	40.64	21672.9	442																				



TABLE D67  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF APRIL  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.24	86.5	2											1	1								
20 TO 25	0.29	112.0	12											3	4	3	2						
25 TO 30	0.70	290.0	2											1	1								
30 TO 35	12.00	5617.1	4													4							
ABOVE 35	14.12	6260.2	10														3	3	1				
TOTAL	20.25	12374.4	30											1	8	9	3	1					
														2	13	14	6	3					

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	12.0	4																				
1 TO 2	0.12	19.7	10																				
2 TO 5	0.57	119.1	42																				
5 TO 10	0.29	81.0	5																				
10 TO 15	0.29	82.4	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.31	311.0	61																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.30	12.0	4																				
1 TO 2	0.12	19.7	10																				
2 TO 5	0.57	119.1	42																				
5 TO 10	0.29	81.0	5																				
10 TO 15	0.29	82.4	0																				
15 TO 20	0.24	86.5	2																				
20 TO 25	0.29	112.0	12																				
25 TO 30	0.70	290.0	2																				
30 TO 35	12.00	5617.1	4																				
ABOVE 35	14.12	6260.2	10																				
TOTAL	20.56	12605.4	90																				

TABLE D67  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF MAY  
NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.43	104.3	2																				
20 TO 25	0.41	159.9	12																				
25 TO 30	0.40	201.4	2																				
30 TO 35	7.00	3056.4	5																				
35 TO 40	27.12	11019.2	500																				
ABOVE 40																							
TOTAL	29.41	15361.1	619																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.35	25.1	27																				
1 TO 2	0.31	53.7	70																				
2 TO 5	0.36	86.6	130																				
5 TO 10	0.39	115.0	60																				
10 TO 15	0.37	126.4	21																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.99	405.6	332																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.19	25.1	27																				
1 TO 2	0.31	53.7	70																				
2 TO 5	0.36	86.6	130																				
5 TO 10	0.39	115.0	60																				
10 TO 15	0.37	126.4	21																				
15 TO 20	0.40	164.3	2																				
20 TO 25	0.41	159.9	12																				
25 TO 30	0.40	201.4	2																				
30 TO 35	7.00	3056.4	5																				
ABOVE 35	27.12	11019.2	500																				
TOTAL	37.00	15766.7	991																				



TABLE D17  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF JUNE  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.36	132.3	1											1									
20 TO 25	0.77	307.2	12											3	7	1	1						
25 TO 30	0.53	224.4	2											2									
30 TO 35	19.84	8482.4	10											5	6	1							
ABOVE 35	12.83	5946.9	7											5	2								
TOTAL	34.34	14693.2	32											13	16	2	1						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.21	33.0	64									5	9	10	15	11	5						
1 TO 2	0.27	45.3	70								1	5	12	19	17	14	10	1	1	1			
2 TO 5	0.30	85.5	117							1	2	4	10	30	39	11	0	3	1				
5 TO 10	0.48	165.4	9											1	7	1							
10 TO 15	0.29	90.4	2											1	1								
15 TO 20	0.36	132.3	1																				
20 TO 25	0.77	307.2	12																				
25 TO 30	0.53	224.4	2																				
30 TO 35	19.84	8482.4	10																				
ABOVE 35	12.83	5946.9	7																				
TOTAL	1.63	407.7	262							2	2	12	30	62	70	37	23	7	2	1			

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (KT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.21	33.0	64																				
1 TO 2	0.27	45.3	70																				
2 TO 5	0.30	85.5	117																				
5 TO 10	0.48	165.4	9																				
10 TO 15	0.29	90.4	2																				
15 TO 20	0.36	132.3	1																				
20 TO 25	0.77	307.2	12																				
25 TO 30	0.53	224.4	2																				
30 TO 35	19.84	8482.4	10																				
ABOVE 35	12.83	5946.9	7																				
TOTAL	35.97	15100.9	294																				

TABLE D18  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF JULY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.43	157.5	18							1		2	6	5	4								
20 TO 25	0.67	187.5	7							1	1	1	1	1	1								
25 TO 30	4.94	2114.0	3									2	1	1	1								
30 TO 35	16.11	6189.7	26								1	14	11										
ABOVE 35	8.77	3913.9	152							6	17	90	29	7	3								
TOTAL	20.77	12359.3	204						1	7	21	113	49	12	3								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35 -30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.20	31.6	13																				
1 TO 2	0.25	40.4	24																				
2 TO 5	0.42	87.3	51																				
5 TO 10	0.35	96.0	9																				
10 TO 15	0.32	99.7	2																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.41	189.6	3																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	2.31	729.4	79																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.20	31.6	13																				
1 TO 2	0.25	40.4	24																				
2 TO 5	0.42	87.3	51																				
5 TO 10	0.35	96.0	9																				
10 TO 15	0.30	99.7	2																				
15 TO 20	0.43	157.5	18																				
20 TO 25	0.67	187.5	7																				
25 TO 30	5.05	2304.5	3																				
30 TO 35	16.11	6189.7	26																				
ABOVE 35	8.77	3913.9	152																				
TOTAL	31.3	12284.7	305																				



TABLE D17a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF AUGUST  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.11	19.2	11																				
2 TO 5	0.23	39.5	20																				
5 TO 10	0.46	125.2	60																				
10 TO 15	0.69	117.1	24																				
15 TO 20	0.92	234.0	14																				
20 TO 25	1.15	351.0	6																				
25 TO 30	1.38	468.0	11																				
30 TO 35	1.61	585.0	17																				
ABOVE 35	1.84	702.0	31																				
TOTAL	43.66	10074.0	55																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	19.2	11																				
1 TO 2	0.23	39.5	20																				
2 TO 5	0.46	125.2	60																				
5 TO 10	0.69	117.1	24																				
10 TO 15	0.92	234.0	14																				
15 TO 20	1.15	351.0	6																				
20 TO 25	1.38	468.0	11																				
25 TO 30	1.61	585.0	17																				
30 TO 35	1.84	702.0	31																				
ABOVE 35	2.07	819.0	51																				
TOTAL	43.66	1017.5	170																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	GSE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	19.2	11																				
1 TO 2	0.23	39.5	20																				
2 TO 5	0.46	125.2	60																				
5 TO 10	0.69	117.1	24																				
10 TO 15	0.92	234.0	14																				
15 TO 20	1.15	351.0	6																				
20 TO 25	1.38	468.0	11																				
25 TO 30	1.61	585.0	17																				
30 TO 35	1.84	702.0	17																				
ABOVE 35	23.11	10150.2	31																				
TOTAL	47.60	23291.0	231																				

TABLE D17b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
ELMENDORF AFB, ALASKA  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF SEPTEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.11	19.2	11																				
2 TO 5	0.23	39.5	20																				
5 TO 10	0.46	125.2	60																				
10 TO 15	0.69	117.1	24																				
15 TO 20	0.92	234.0	14																				
20 TO 25	1.15	351.0	6																				
25 TO 30	1.38	468.0	11																				
ABOVE 35	1.61	585.0	17																				
TOTAL	12.42	5699.0	20																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	19.2	11										2	1		1							
1 TO 2	0.23	39.5	20										2	1									
2 TO 5	0.46	125.2	60											1	1								
5 TO 10	0.69	117.1	24										1										
10 TO 15	0.92	234.0	14											3	1								
15 TO 20	1.15	351.0	6																				
20 TO 25	1.38	468.0	11																				
25 TO 30	1.61	585.0	17																				
30 TO 35	1.84	702.0	31																				
ABOVE 35																							
TOTAL	12.42	1299.0	14										4	4	4	1							

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	19.2	11																				
1 TO 2	0.23	39.5	20										2	1			1						
2 TO 5	0.46	125.2	60										2	1	1								
5 TO 10	0.69	117.1	24										1	3	1								
10 TO 15	0.92	234.0	14																				
15 TO 20	1.15	351.0	6										1	1									
20 TO 25	1.38	468.0	11																				
25 TO 30	1.61	585.0	17																				
30 TO 35	1.84	702.0	31										2	6	2								
ABOVE 35	0.94	361.6	6												1	7							
TOTAL	12.39	5627.0	94										9	10	6	1							



TABLE D10  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
OWES AFB, DELAWARE  
AND  
CHARLESTON AFB/PMI, SOUTH CAROLINA

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.	0.	0																					
1 TO 2	0.	0.	0																					
2 TO 5	0.	0.	0																					
5 TO 10	0.	0.	0																					
10 TO 15	0.	0.	0																					
15 TO 20	1.00	200.0	3												3									
20 TO 25	2.25	450.0	55											3	14	32								
25 TO 30	3.00	600.0	17											1	6	6	2							
30 TO 35	3.00	600.0	9											1	2	6								
ABOVE 35	6.20	1272.0	6												2	3	1							
TOTAL	16.01	7012.0	90											5	24	52	7							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.74	107.5	165								3	10	20	33	46	33	10	5	2	1			
1 TO 2	1.20	193.0	165								2	2	0	49	65	39	4	3	2				
2 TO 5	2.36	506.2	243								1	17	19	71	94	33	10	6					
5 TO 10	1.10	357.0	65									2	7	10	20	14	2	1	1				
10 TO 15	1.32	243.7	24										3	4	13								
15 TO 20	0.00	0.0	0																				
20 TO 25	1.49	529.0	61										1	10	39	3							
25 TO 30	0.70	132.7	12											3	7	1							
30 TO 35	1.07	236.0	22										1	9	12								
ABOVE 35	0.22	96.0	1																				
TOTAL	10.92	3302.6	755								6	24	56	200	291	114	34	15	5	1			

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.00	105																				
1 TO 2	1.20	193.9	165							3	12	20	33	40	33	10	5	2	1				
2 TO 5	2.30	506.2	245							2	2	6	49	65	32	4	3	2					
5 TO 10	1.18	357.0	65							1	10	19	71	94	33	13	6						
10 TO 15	1.07	362.7	24								2	7	10	20	14	2	1	1					
15 TO 20	1.14	411.3	3									3	0	13									
20 TO 25	3.60	1826.0	114									4	32	71	7								
25 TO 30	3.79	1640.5	20									2	9	19	3								
30 TO 35	5.00	2564.1	31										2	11	10								
ABOVE 35	6.51	2772.5	7										2	4	1								
TOTAL	27.53	10331.3	845							6	24	61	133	343	121	36	15	5	1				

TABLE D10  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
OWES AFB, DELAWARE  
AND  
CHARLESTON AFB/PMI, SOUTH CAROLINA  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.00	172.4	3																				
20 TO 25	0.00	335.3	45																				
25 TO 30	1.30	599.4	14																				
30 TO 35	1.50	682.3	9																				
ABOVE 35	5.75	2425.7	1																				
TOTAL	9.07	4179.1	72																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.00	90																				
1 TO 2	0.02	112.1	91																				
2 TO 5	1.02	306.4	223																				
5 TO 10	0.52	157.3	40																				
10 TO 15	0.00	103.7	3																				
15 TO 20	0.00	20.1	3																				
20 TO 25	1.03	529.0	61																				
25 TO 30	0.70	302.7	12																				
30 TO 35	1.07	036.6	22																				
ABOVE 35	0.22	00.0	1																				
TOTAL	7.00	2575.3	557																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.00	90																				
1 TO 2	0.00	0.00	91																				
2 TO 5	1.00	200.0	223																				
5 TO 10	0.00	0.00	40																				
10 TO 15	0.00	0.00	3																				
15 TO 20	0.00	0.00	3																				
20 TO 25	0.00	0.00	106																				
25 TO 30	0.00	0.00	20																				
30 TO 35	0.00	0.00	31																				
ABOVE 35	0.00	0.00	2																				
TOTAL	7.00	6750.0	620																				



TABLE D10c  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DOVER AFB, DELAWARE  
AND  
CHARLESTON AFB/NUMC, SOUTH CAROLINA  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.34	120.3	0																				
20 TO 25	1.17	476.3	0																				
25 TO 30	2.95	617.0	1																				
30 TO 35	1.70	700.4	0																				
ABOVE 35	0.35	22.4	0																				
TOTAL	4.29	1829.4	1																				

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	WDE DISTRIBUTION (FT./SEC.)												
											-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.37	50.0	65								2	4	16	22	16	4				1			
1 TO 2	0.30	66.6	75								3	24	27	10			1						
2 TO 5	0.40	112.2	16								2	4	13										
5 TO 10	0.40	160.1	3								1		1	1									
10 TO 15	0.37	124.0	10								1	2	7										
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	2.36	695.7	167								2	11	66	67	35	4	1		1				

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	WDE DISTRIBUTION (FT./SEC.)												
											-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.37	50.0	65								2	4	16	27	16	4							
1 TO 2	0.30	66.6	75								3	24	27	10			1						
2 TO 5	0.40	112.2	16								2	4	10										
5 TO 10	0.40	160.1	3								1		1	1									
10 TO 15	0.37	124.0	10								1	2	7										
15 TO 20	0.34	120.3	0																				
20 TO 25	1.17	476.3	0																				
25 TO 30	2.95	617.0	1																				
30 TO 35	1.70	700.4	0											1									
ABOVE 35	0.35	22.4	0																				
TOTAL	6.35	2325.2	166								2	11	46	60	35	4	1		1				

TABLE D10d  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DOVER AFB, DELAWARE  
AND  
CHARLESTON AFB/NUMC, SOUTH CAROLINA  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	3																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.23	86.5	0																				
20 TO 25	0.22	80.3	0																				
25 TO 30	0.76	333.4	2																				
30 TO 35	0.65	287.6	0																				
ABOVE 35	0.40	225.6	5																				
TOTAL	2.35	1322.3	15																				

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.37	12.2	5																				
1 TO 2	0.15	17.1	1																				
2 TO 5	0.37	80.6	1																				
5 TO 10	0.19	60.6	13																				
10 TO 15	0.15	52.2	11																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	1.09	229.5	31																				

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.37	12.2	5																				
1 TO 2	0.10	17.1	1																				
2 TO 5	0.37	80.6	1																				
5 TO 10	0.19	60.4	13																				
10 TO 15	0.15	52.2	11																				
15 TO 20	0.23	86.5	0																				
20 TO 25	0.22	80.3	0																				
25 TO 30	0.76	333.4	2																				
30 TO 35	0.65	287.6	0																				
ABOVE 35	0.40	225.6	5																				
TOTAL	3.23	1251.8	46																				



TABLE D18  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DUNES AFB, DELAWARE  
AND  
CHARLESTON AFB/MARL, SOUTH CAROLINA  
FOR THE  
MONTH OF JANUARY  
NON-STORM CONDITIONS

			WIND DISTRIBUTION (FT./SEC.)																						
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35		
BELOW 1	..	..	..																						
1 TO 2	..	..	..																						
2 TO 5	..	..	..																						
5 TO 10	..	..	..																						
10 TO 15	..	..	..																						
15 TO 20	0.29	104.5	0																						
20 TO 25	0.43	160.7	1																						
25 TO 30	1.10	409.1	4																						
30 TO 35	1.27	549.6	9																						
ABOVE 35	5.75	2425.7	1																						
TOTAL	8.91	3743.6	15																						

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	..	..	..																				
1 TO 2	0.25	62.0	17																				
2 TO 5	0.63	166.5	120																				
5 TO 10	0.29	92.4	25																				
10 TO 15	0.28	91.7	2																				
15 TO 20	..	..	0																				
20 TO 25	..	..	0																				
25 TO 30	..	..	0																				
30 TO 35	..	..	0																				
ABOVE 35	..	..	0																				
TOTAL	1.62	392.9	223																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	22.5	51							1	4	0	0	11	11	0	1						
1 TO 2	0.25	62.0	17											3	10	1	2						
2 TO 5	0.63	166.5	120							1	0	11	39	43	17	0	3						
5 TO 10	0.29	92.4	25								2	2	6	0	7								
10 TO 15	0.20	92.7	2																				
15 TO 20	0.29	104.5	0																				
20 TO 25	0.43	160.7	1												1								
25 TO 30	1.10	409.1	4												2	2							
30 TO 35	1.27	549.6	9										1	2	0								
ABOVE 35	5.75	2425.7	1												1								
TOTAL	10.53	4136.5	230							2	14	23	63	82	36	14	4						

TABLE D19  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DUNES AFB, DELAWARE  
AND  
CHARLESTON AFB/MARL, SOUTH CAROLINA  
FOR THE  
MONTH OF FEBRUARY  
NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	..	..	..																				
1 TO 2	..	..	..																				
2 TO 5	..	..	..																				
5 TO 10	..	..	..																				
10 TO 15	..	..	..																				
15 TO 20	0.19	67.9	1																				
20 TO 25	0.43	160.6	0																				
25 TO 30	0.23	102.3	10																				
30 TO 35	0.27	109.7	0																				
ABOVE 35	..	..	..																				
TOTAL	1.26	435.5	57																				

STORM CONDITION

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	..	..	..																				
1 TO 2	0.44	71.3	76																				
2 TO 5	0.89	159.9	95																				
5 TO 10	0.22	66.0	24																				
10 TO 15	0.22	71.1	1																				
15 TO 20	0.09	28.1	0																				
20 TO 25	1.63	529.9	61																				
25 TO 30	0.70	302.7	12																				
30 TO 35	1.97	834.8	22																				
ABOVE 35	0.22	66.0	1																				
TOTAL	6.36	2102.4	334																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.14	18.0	64																				
1 TO 2	0.44	71.3	76																				
2 TO 5	0.89	159.9	95																				
5 TO 10	0.22	66.0	24																				
10 TO 15	0.22	71.1	1																				
15 TO 20	0.27	66.0	3																				
20 TO 25	1.64	530.0	100																				
25 TO 30	0.93	431.0	22																				
30 TO 35	2.20	937.6	22																				
ABOVE 35	0.22	66.0	1																				
TOTAL	7.42	2617.9	391																				



TABLE D8Q  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DOVER AFB, DELAWARE  
AND  
CHARLESTON AFB/MUNI, SOUTH CAROLINA  
FOR THE  
MONTH OF APRIL

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.15	96.2	0																				
20 TO 25	0.06	306.2	0																				
25 TO 30	0.00	39.0	0																				
30 TO 35	0.67	296.7	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.06	773.0	0																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	20.0	0											1	5	2							
1 TO 2	0.11	16.0	1											1	1								
2 TO 5	0.19	66.3	12										1	1	10								
5 TO 10	0.15	65.0	3										1	1	1	1							
10 TO 15	0.13	45.4	10										1	2	7								
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.76	182.1	34										3	4	24	3							

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	20.0	0											1	5	2							
1 TO 2	0.11	16.0	1											1	1								
2 TO 5	0.19	66.3	12										1	1	10								
5 TO 10	0.15	65.0	3										1	1	1	1							
10 TO 15	0.13	45.4	10										1	2	7								
15 TO 20	0.15	36.2	0																				
20 TO 25	0.06	306.2	0																				
25 TO 30	0.00	39.0	0																				
30 TO 35	0.67	296.7	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	1.63	955.1	34											3	4	24	3						

TABLE D8H  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DOVER AFB, DELAWARE  
AND  
CHARLESTON AFB/MUNI, SOUTH CAROLINA  
FOR THE  
MONTH OF MAY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.19	74.1	0																				
20 TO 25	0.22	84.1	0																				
25 TO 30	0.07	361.2	1											1									
30 TO 35	1.12	696.7	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	2.45	1056.5	1											1									

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	GSE DISTRIBUTION (FT./SEC.)																			
1000 FT.	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.19	27.4	57											2	4	15	17	14	4				
1 TO 2	0.20	67.0	72											3	24	26	10						
2 TO 5	0.27	63.9	4											1	3								
5 TO 10	0.33	95.2																					
10 TO 15	0.24	70.4	0																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	1.04	313.6	133											2	8	42	43	32	4	1			

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	GSE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.19	27.4	57											2	4	15	17	14	4				
1 TO 2	0.20	67.0	72											3	24	26	10						
2 TO 5	0.27	63.9	4											1	3								
5 TO 10	0.33	95.2	0																				
10 TO 15	0.24	70.4	0																				
15 TO 20	0.19	70.1	0																				
20 TO 25	0.22	84.1	0																				
25 TO 30	0.07	361.2	1											1									
30 TO 35	1.12	696.7	0																				
ABOVE 35	0.00	22.4	0																				
TOTAL	3.75	1370.1	134											2	8	42	44	32	4	1			



TABLE D18  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DOVER AFB, DELAWARE  
AND  
CHARLESTON AFB/MUNI, SOUTH CAROLINA  
FOR THE  
MONTH OF JUNE

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.22	63.5	0																				
20 TO 25	0.20	60.0	0																				
25 TO 30	0.71	313.7	2																				
30 TO 35	0.37	29.1	0																				
ABOVE 35	0.40	225.6	5																				
TOTAL	1.67	726.8	15																				

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000'S)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.36	9.2	2																				
1 TO 2	0.13	16.3	1																				
2 TO 5	0.27	55.3	0																				
5 TO 10	0.17	55.5	13																				
10 TO 15	0.13	43.7	11																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.73	183.8	27																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.36	9.2	2																				
1 TO 2	0.17	16.3	1																				
2 TO 5	0.27	55.3	0																				
5 TO 10	0.17	55.5	13																				
10 TO 15	0.13	43.7	11																				
15 TO 20	0.22	63.5	0																				
20 TO 25	0.20	60.0	0																				
25 TO 30	0.71	313.7	2																				
30 TO 35	0.37	29.1	0																				
ABOVE 35	0.40	225.6	5																				
TOTAL	2.40	908.8	42																				

TABLE D19  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DOVER AFB, DELAWARE  
AND  
CHARLESTON AFB/MUNI, SOUTH CAROLINA  
FOR THE  
MONTH OF AUGUST

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.22	60.0	0																				
20 TO 25	0.32	9.3	0																				
25 TO 30	0.5	19.6	0																				
30 TO 35	0.58	256.5	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.67	295.5	0																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.31	1.3	3											1									
1 TO 2	0.00	0.0	0																				
2 TO 5	0.11	34.3	1										1										
5 TO 10	0.01	4.0	0																				
10 TO 15	0.02	6.5	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.16	49.5	4										1	1		1		1					

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.31	1.3	3											1									
1 TO 2	0.30	0.0	0															1					
2 TO 5	0.11	34.3	1										1										
5 TO 10	0.01	4.0	0																				
10 TO 15	0.02	6.5	0																				
15 TO 20	0.02	6.5	0																				
20 TO 25	0.32	9.3	0																				
25 TO 30	0.5	19.6	0																				
30 TO 35	0.58	256.5	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.83	363.3	4										1	1		1		1					



TABLE D10  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DOVER AFB, DELAWARE  
AND  
CHATEAUBOURN AB, FRANCE

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.24	34.1	40																					
1 TO 2	0.36	55.2	8																					
2 TO 5	0.57	134.1	18																					
5 TO 10	0.35	105.4	6																					
10 TO 15	0.46	152.7	3																					
15 TO 20	0.57	212.6	0																					
20 TO 25	0.79	311.0	0																					
25 TO 30	0.84	353.1	0																					
30 TO 35	3.56	1577.0	1																					
ABOVE 35	33.37	15106.1	35											0	23	3		1						
TOTAL	39.13	17651.4	56											0	24	3		1						

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																				
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.24	34.1	40							1	5	0	4	7	5		20	12.5	15	17.5	20	25	30	35
1 TO 2	0.36	55.2	8										1	3	2		5	4	1					
2 TO 5	0.57	134.1	18										1	1	6	0	1	1						
5 TO 10	0.35	105.4	6													5	1							
10 TO 15	0.46	152.7	3																					
15 TO 20	0.57	212.6	0																					
20 TO 25	0.79	311.0	0																					
25 TO 30	0.84	353.1	0																					
30 TO 35	3.56	1577.0	1																					
ABOVE 35	33.37	15106.1	35																					
TOTAL	1.99	479.5	72							1	6	10	13	22	9	6	4	1						

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.24	34.1	40								1	5	0	4	7	5							
1 TO 2	0.36	55.2	8									1	3	2	2								
2 TO 5	0.57	134.1	18								1	1	6	8	1	1							
5 TO 10	0.35	105.4	6											5	1								
10 TO 15	0.46	152.7	0																				
15 TO 20	0.57	212.6	0																				
20 TO 25	0.79	311.0	0																				
25 TO 30	0.84	353.1	0																				
30 TO 35	3.56	1577.0	1																				
ABOVE 35	33.37	15106.1	35										0	1	3								
TOTAL	41.12	18130.9	100								1	6	10	21	46	12	6	5	1				

TABLE D10  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DOVER AFB, DELAWARE  
AND  
CHATEAUBOURN AB, FRANCE  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.57	212.6	0																				
20 TO 25	0.79	311.0	0																				
25 TO 30	0.84	353.1	0																				
30 TO 35	3.56	1577.0	1																				
ABOVE 35	33.37	15106.1	35											0	23	3		1					
TOTAL	39.13	17651.4	36											0	24	3		1					

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.24	34.1	40																				
1 TO 2	0.36	55.2	8																				
2 TO 5	0.57	134.1	18																				
5 TO 10	0.35	105.4	6																				
10 TO 15	0.46	152.7	3																				
15 TO 20	0.57	212.6	0																				
20 TO 25	0.79	311.0	0																				
25 TO 30	0.84	353.1	0																				
30 TO 35	3.56	1577.0	1																				
ABOVE 35	33.37	15106.1	35											1	6	10	13	22	9	6	4	1	
TOTAL	1.99	479.5	72											1	6	10	13	22	9	6	4	1	

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.24	34.1	40																				
1 TO 2	0.36	55.2	8																				
2 TO 5	0.57	134.1	18																				
5 TO 10	0.35	105.4	6																				
10 TO 15	0.46	152.7	3																				
15 TO 20	0.57	212.6	0																				
20 TO 25	0.79	311.0	0																				
25 TO 30	0.84	353.1	0																				
30 TO 35	3.56	1577.0	1																				
ABOVE 35	33.37	15106.1	35											1	6	10	13	22	9	6	4	1	
TOTAL	41.12	18130.9	100											1	6	10	21	46	12	6	5	1	



TABLE D19a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DOVER AFB, DELAWARE  
AND  
CHATEAUGUARD AB, FRANCE  
FOR THE  
MONTH OF JANUARY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.0	0																				
5 TO 10	0.00	0.0	0																				
10 TO 15	0.00	0.0	0																				
15 TO 20	0.42	147.6	0																				
20 TO 25	0.62	246.5	0																				
25 TO 30	0.62	203.3	0																				
30 TO 35	1.79	796.1	1																				
ABOVE 35	25.95	11924.9	15																				
TOTAL	26.38	13370.1	16											2	11	1		1					
														2	12	1		1					

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.19	27.1	34																				
1 TO 2	0.24	35.0	8																				
2 TO 5	0.44	98.7	11																				
5 TO 10	0.24	70.3	5																				
10 TO 15	0.34	110.1	3																				
15 TO 20	0.00	0.0	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.00	0.0	0																				
30 TO 35	0.00	0.0	0																				
ABOVE 35	0.00	0.0	0																				
TOTAL	1.45	342.0	50																				
														1	6	10	10	16	7	4	3	1	

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.19	27.1	34							1	9	0	6	3	1								
1 TO 2	0.24	35.0	8									1	3										
2 TO 5	0.44	98.7	11									1	1	3	4	1	1						
5 TO 10	0.24	70.3	5												4	1							
10 TO 15	0.34	110.1	3																				
15 TO 20	0.42	147.6	0																				
20 TO 25	0.62	246.5	0																				
25 TO 30	0.62	203.3	0																				
30 TO 35	1.79	796.1	1																				
ABOVE 35	25.95	11924.9	15										1										
TOTAL	34.93	13722.1	74							1	6	10	12	20	0	4	4	1					

TABLE D19b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DOVER AFB, DELAWARE  
AND  
CHATEAUGUARD AB, FRANCE  
FOR THE  
MONTH OF FEBRUARY  
NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.0	0																				
5 TO 10	0.00	0.0	0																				
10 TO 15	0.00	0.0	0																				
15 TO 20	0.17	65.0	0																				
20 TO 25	0.17	65.3	0																				
25 TO 30	0.22	93.2	0																				
30 TO 35	1.77	781.7	3																				
ABOVE 35	7.42	3271.1	20																				
TOTAL	9.75	4273.3	23											6	12	2							
														6	12	2							

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.12	19.4	0																				
2 TO 5	0.16	35.5	7																				
5 TO 10	0.11	35.1	1																				
10 TO 15	0.12	46.5	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.53	137.5	14																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.12	19.4	0																				
2 TO 5	0.16	35.5	7																				
5 TO 10	0.11	35.1	1																				
10 TO 15	0.12	46.5	0																				
15 TO 20	0.17	65.0	0																				
20 TO 25	0.17	65.3	0																				
25 TO 30	0.22	93.2	0																				
30 TO 35	1.77	781.7	3																				
ABOVE 35	7.42	3271.1	20																				
TOTAL	10.29	4413.0	34											6	12	2							
														6	10	4	2	1					



TABLE D20a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CHARLESTON AIRPORT, SOUTH CAROLINA  
AND  
TORREJON DE ARDEZAN, SPAIN

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	..	..	0																				
1 TO 2	..	..	0																				
2 TO 5	..	..	0																				
5 TO 10	..	..	0																				
10 TO 15	..	..	0																				
15 TO 20	0.30	137.0	13							1	2	3	1	3				1	1		1		
20 TO 25	0.42	160.0	0																				
25 TO 30	0.42	170.0	0																				
30 TO 35	0.41	1620.3	34											14	10	1	1						
ABOVE 35	22.00	8990.6	80										6	37	30	0							
TOTAL	33.49	13090.0	127							1	2	9	45	50	7	1	1	1		1			

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	..	..	0																				
1 TO 2	0.25	0.3	17							1	1	2	5	5	9	0				2	3	1	
2 TO 5	0.40	00.0	35									3	5	5	5	1							
5 TO 10	0.42	110.9	16									3	4	7	12	6	2	1					
10 TO 15	0.55	100.3	10											3	12	2	1						
15 TO 20	..	..	0											2	7	1							
20 TO 25	..	..	0																				
25 TO 30	..	..	0																				
30 TO 35	..	..	0																				
ABOVE 35	..	..	0																				
TOTAL	1.52	401.6	119							1	1	5	12	10	43	20	12	3	3	1			

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	..	..	0																				
1 TO 2	0.25	0.3	17							1	1	2	5	5	9	0				2	3	1	
2 TO 5	0.40	00.0	35									3	4	7	12	6	2	1					
5 TO 10	0.42	110.9	16											3	12	2	1						
10 TO 15	0.55	100.3	10											2	7	1							
15 TO 20	..	..	0																				
20 TO 25	..	..	0																				
25 TO 30	..	..	0																				
30 TO 35	0.41	1620.3	34											14	10	1	1						
ABOVE 35	22.00	8990.6	80											6	37	30	0						
TOTAL	32.71	13090.5	244							2	1	7	21	63	102	27	13	4	4	1	1		

TABLE D20b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CHARLESTON AIRPORT, SOUTH CAROLINA  
AND  
TORREJON DE ARDEZAN, SPAIN  
FOR THE  
SAFING SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																		
				-35 -30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	..	..	0																			
1 TO 2	..	..	0																			
2 TO 5	..	..	0																			
5 TO 10	..	..	0																			
10 TO 15	..	..	0																			
15 TO 20	0.17	60.3	0																			
20 TO 25	0.19	75.0	0																			
25 TO 30	0.17	70.0	0																			
30 TO 35	0.07	302.0	7										4	3								
ABOVE 35	13.79	5740.9	3										2	1								
TOTAL	14.09	6346.2	10										6	4								

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.20	4.5	5							1	1	2	3	0	4	7	1	1	1				
2 TO 5	0.20	51.0	7									1	1	3									
5 TO 10	0.16	60.1	1									1	2	4									
10 TO 15	0.17	57.0	1																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	0.65	163.0	42							1	1	2	5	5	10	4	7	1	1	1			

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.20	4.5	5							1	1	2	3	0	4	7	1	1	1				
2 TO 5	0.20	51.0	7									1	1	3									
5 TO 10	0.16	60.1	1										1	2	4								
10 TO 15	0.17	57.0	1																				
15 TO 20	..	..	0																				
20 TO 25	..	..	0																				
25 TO 30	..	..	0																				
30 TO 35	0.07	302.0	7											4	3								
ABOVE 35	13.79	5740.9	3											2	1								
TOTAL	15.35	6346.2	52							1	1	2	5	9	20	4	7	1	1	1			



**TABLE D203**  
**DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY**  
**FOR THE ROUTE BETWEEN**  
**CHARLESTON AFB/HUMS, SOUTH CAROLINA**  
**AND**  
**TORREJON DE ARDOZ AB, SPAIN**  
**FOR THE**  
**MONTH OF APRIL**  
**NON-STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.10	66.6	13																				
20 TO 25	0.25	90.9	0																				
25 TO 30	0.25	109.9	0																				
30 TO 35	7.53	3246.5	27																				
ABOVE 35	7.60	3247.7	77																				
TOTAL	15.00	6757.6	117																				

**STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.03	4.6	12									2	2	3	1	2	1							
1 TO 2	0.02	3.0	12									2	2	2	2	5	1							
2 TO 5	0.10	33.6	20									3	3	5	0	6	2	1						
5 TO 10	0.27	72.4	16											5	10	2	1							
10 TO 15	0.37	123.3	9											2	6	1								
15 TO 20	0.	0.	0																					
20 TO 25	0.	0.	0																					
25 TO 30	0.	0.	0																					
30 TO 35	0.	0.	0																					
ABOVE 35	0.	0.	0																					
TOTAL	0.87	237.8	77									3	7	15	27	16	9	2	1					

**STORM PLUS NON-STORM**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.03	4.6	12																				
1 TO 2	0.02	3.0	12																				
2 TO 5	0.10	33.6	20																				
5 TO 10	0.27	72.4	16																				
10 TO 15	0.37	123.3	9																				
15 TO 20	0.14	66.6	13																				
20 TO 25	0.23	90.9	0																				
25 TO 30	0.25	109.9	0																				
30 TO 35	7.53	3246.5	27																				
ABOVE 35	7.60	3247.7	77																				
TOTAL	16.67	6995.4	194																				

**TABLE D204**  
**DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY**  
**FOR THE ROUTE BETWEEN**  
**CHARLESTON AFB/HUMS, SOUTH CAROLINA**  
**AND**  
**TORREJON DE ARDOZ AB, SPAIN**  
**FOR THE**  
**MONTH OF APRIL**  
**NON-STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.07	24.1	0																				
20 TO 25	0.00	32.7	0																				
25 TO 30	0.07	26.8	0																				
30 TO 35	0.10	43.0	0																				
ABOVE 35	6.90	3017.4	3																				
TOTAL	7.22	3144.1	3																				

**STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	2.5	22								1	2											
1 TO 2	0.01	1.0	4									1	2										
2 TO 5	0.17	32.3	4										1	2									
5 TO 10	0.07	19.9	0																				
10 TO 15	0.07	24.0	1																				
15 TO 20	0.	0.	0											1									
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.34	90.4	31								1	1	2	3	2	10	4	5	1	1	1		

**STORM PLUS NON-STORM**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	2.5	22							1	2	3		4	6	10	12.5	15	17.5	20	25	30	35
1 TO 2	0.01	1.0	4								1												
2 TO 5	0.17	24.3	4										1	2									
5 TO 10	0.07	19.9	0																				
10 TO 15	0.07	24.0	1													1							
15 TO 20	0.07	24.1	0																				
20 TO 25	0.00	32.7	0																				
25 TO 30	0.07	26.8	0																				
30 TO 35	0.10	43.0	0																				
ABOVE 35	6.90	3017.4	3										2	1									
TOTAL	7.36	3267.7	35							1	1	2	3	2	11	4	8	1	1	1			



TABLE D207  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CHARLESTON AFB/MUNI, SOUTH CAROLINA  
AND  
TORREJON DE ARDOZ AB, SPAIN  
FOR THE  
MONTH OF MAY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.11	39.0	0																				
20 TO 25	0.11	43.0	0																				
25 TO 30	0.10	42.2	0																				
30 TO 35	0.77	337.0	7																				
ABOVE 35	6.30	2731.5	0											4	3								
TOTAL	7.47	3194.5	7											4	3								

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (KT./SEC.)																			
(1000 FT)	(HOURS)	MILES	(PEAKS)	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	2.6	7											1	4	2							
1 TO 2	0.02	2.6	1																				
2 TO 5	0.09	10.7	3										1	1	1								
5 TO 10	0.09	26.3	3																				
10 TO 15	0.10	32.0	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.32	63.1	11								2	1	6		2								

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (KTS./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	2.6	7									1											
1 TO 2	0.02	2.6	1																				
2 TO 5	0.09	10.7	3										1	1	1								
5 TO 10	0.09	26.3	0																				
10 TO 15	0.10	32.0	0																				
15 TO 20	0.11	39.0	0																				
20 TO 25	0.11	43.0	0																				
25 TO 30	0.10	42.2	0																				
30 TO 35	0.77	337.0	7																				
ABOVE 35	6.30	2731.5	0																				
TOTAL	7.79	3277.5	10								2	3	3			2							

TABLE D207  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CHARLESTON AFB/MUNI, SOUTH CAROLINA  
AND  
TORREJON DE ARDOZ AB, SPAIN  
FOR THE  
MONTH OF JULY

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.10	66.6	13							1	2	3	1	3			1	1			1		
20 TO 25	0.23	90.0	0																				
25 TO 30	0.25	103.9	0																				
30 TO 35	7.53	3248.5	27										10	15	1	1							
ABOVE 35	7.60	3247.7	77										6	20	37	6							
TOTAL	15.00	6797.0	117						1	2	9	34	55	7	1		1	1			1		

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.33	4.6	12									2	2	2	2	1		1	2				
1 TO 2	0.02	3.0	12									2	2	2	2	1							
2 TO 5	0.10	33.6	20									3	3	5	0	6	2	1					
5 TO 10	0.27	72.4	16											5	10	2	1						
10 TO 15	0.37	123.3	9											7	6	1							
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.67	237.0	77									3	7	15	27	16	5	2	2				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.33	4.6	12																				
1 TO 2	0.02	3.0	12																				
2 TO 5	0.10	33.6	20																				
5 TO 10	0.27	72.4	16																				
10 TO 15	0.37	123.3	9																				
15 TO 20	0.10	36.6	13																				
20 TO 25	0.23	90.0	0																				
25 TO 30	0.25	103.9	0																				
30 TO 35	7.53	3248.5	27																				
ABOVE 35	7.60	3247.7	77																				
TOTAL	16.07	6995.4	194																				



**TABLE DIII**  
**DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY**  
**FOR THE ROUTE BETWEEN**  
**MCQUIRE AFB, NEW JERSEY**  
**AND**  
**RHEIN MAIN AFB, GERMANY**  
**FOR THE**  
**SPRING SEASON**

**NON-STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.35	56.7	70																				
1 TO 2	0.66	110.4	99																				
2 TO 5	1.00	433.1	190																				
5 TO 10	1.43	414.0	76																				
10 TO 15	1.32	450.9	25																				
15 TO 20	2.25	842.0	10																				
20 TO 25	2.76	1075.4	11											2	7	1							
25 TO 30	2.63	1118.0	24												5	1							
30 TO 35	67.35	29839.3	229												4	19							
ABOVE 35	27.00	12517.2	209																				
TOTAL	102.00	46592.7	543																				

**STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.35	56.7	70																				
1 TO 2	0.66	110.4	99							1	6	5	17	14	17	6	1						
2 TO 5	1.00	433.1	190					1		1	7	6	27	26	24	4	3						
5 TO 10	1.43	414.0	76						1			19	34	46	33	13	4						
10 TO 15	1.32	450.9	25									5	6	20	40	5	2						
15 TO 20	0.	0.	0											5	19	1							
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	9.97	1469.2	470					1	1	2	14	40	103	145	80	25	0	1					

**STORM PLUS NON-STORM**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.35	56.7	70																				
1 TO 2	0.66	110.4	99																				
2 TO 5	1.00	433.1	190																				
5 TO 10	1.43	414.0	76																				
10 TO 15	1.32	450.9	25																				
15 TO 20	2.25	842.0	10																				
20 TO 25	2.76	1075.4	11																				
25 TO 30	2.63	1118.0	24																				
30 TO 35	67.35	29839.3	229																				
ABOVE 35	27.00	12517.2	209																				
TOTAL	100.99	46601.9	983																				

**TABLE DIII**  
**DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY**  
**FOR THE ROUTE BETWEEN**  
**MCQUIRE AFB, NEW JERSEY**  
**AND**  
**RHEIN MAIN AFB, GERMANY**  
**FOR THE**  
**SPRING SEASON**

**NON-STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	3.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.37	550.3	5											2	1								
20 TO 25	1.24	409.7	0										4	3									
25 TO 30	0.94	380.0	22										4	17	1								
30 TO 35	20.64	13402.3	24										7	19		1							
ABOVE 35	14.30	4913.9	234										60	110	19	3	2	1					
TOTAL	47.52	21341.0	291										2	2	7	19	60	110	19	3	2	1	

**STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.14	24.1	30																				
1 TO 2	0.23	41.7	70							1	4	7	14	13	17	9	1		1				
2 TO 5	0.76	179.9	131							1	4	9	23	20	16	3	3						
5 TO 10	0.91	190.0	42									10	29	37	31	11	4						
10 TO 15	0.62	216.4	23									3	3	13	21	1	1						
15 TO 20	0.	0.	0											9	17	1							
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	2.26	617.6	333						1	1	2	13	33	64	100	62	20	0.	1				

**STORM PLUS NON-STORM**

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.14	24.1	30							1	4	7	14	13	9	1							
1 TO 2	0.23	41.7	70							1	6	9	23	20	16	3	3						
2 TO 5	0.76	179.9	131									10	29	37	31	11	4						
5 TO 10	0.91	190.0	42									3	8	13	21	1							
10 TO 15	0.62	216.4	23											5	17	1							
15 TO 20	1.37	550.3	5												3	1							
20 TO 25	1.26	400.7	8																				
25 TO 30	0.94	404.8	22												4	17							
30 TO 35	29.64	15402.3	24														1						
ABOVE 35	14.50	6813.0	204																				
TOTAL	49.79	21950.6	634																				



**TABLE 211**  
**DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY**  
**FOR THE ROUTE BETWEEN**  
**REQUIRE AFB, NEW JERSEY**  
**AND**  
**RHEIN MAIN AFB, GERMANY**  
**FOR THE**  
**SUMMER SEASON**  
**NON-STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.	0.	0													
1 TO 2	0.	0.	0													
2 TO 5	0.	0.	0													
5 TO 10	0.	0.	0													
10 TO 15	0.	0.	0													
15 TO 20	0.02	105.2	1													
20 TO 25	0.05	327.4	2													
25 TO 30	0.47	197.7	1													
30 TO 35	10.00	6501.0	169													
ABOVE 35	0.00	3994.5	42													
TOTAL	30.62	13289.0	219													

**STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.12	16.4	0													
1 TO 2	0.33	55.2	4													
2 TO 5	0.64	170.5	0													
5 TO 10	0.29	66.7	7													
10 TO 15	0.50	99.3	2													
15 TO 20	0.	0.	0													
20 TO 25	0.	0.	0													
25 TO 30	0.	0.	0													
30 TO 35	0.	0.	0													
ABOVE 35	0.	0.	0													
TOTAL	1.69	432.9	29													

**STORM PLUS NON-STORM**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.12	16.4	0													
1 TO 2	0.33	55.2	4													
2 TO 5	0.64	170.5	0													
5 TO 10	0.29	66.7	7													
10 TO 15	0.50	99.3	2													
15 TO 20	0.02	105.2	1													
20 TO 25	0.05	327.4	2													
25 TO 30	0.47	197.7	1													
30 TO 35	10.00	6501.0	169													
ABOVE 35	0.00	3994.5	42													
TOTAL	32.32	13696.7	244													

**TABLE 212**  
**DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY**  
**FOR THE ROUTE BETWEEN**  
**REQUIRE AFB, NEW JERSEY**  
**AND**  
**RHEIN MAIN AFB, GERMANY**  
**FOR THE**  
**AUTUMN SEASON**  
**NON-STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.	0.	0													
1 TO 2	0.	0.	0													
2 TO 5	0.	0.	0													
5 TO 10	0.	0.	0													
10 TO 15	0.	0.	0													
15 TO 20	0.15	127.3	4													
20 TO 25	0.55	250.3	1													
25 TO 30	1.21	519.6	1													
30 TO 35	17.02	7000.0	20													
ABOVE 35	4.00	2000.0	13													
TOTAL	24.03	10020.0	57													

**STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.09	14.3	3													
1 TO 2	0.10	17.5	17													
2 TO 5	0.40	67.1	11													
5 TO 10	0.62	104.9	27													
10 TO 15	0.40	105.2	0													
15 TO 20	0.	0.	0													
20 TO 25	0.	0.	0													
25 TO 30	0.	0.	0													
30 TO 35	0.	0.	0													
ABOVE 35	0.	0.	0													
TOTAL	1.61	410.6	58													

**STORM PLUS NON-STORM**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.09	14.3	3													
1 TO 2	0.10	17.5	17													
2 TO 5	0.40	67.1	11													
5 TO 10	0.62	104.9	27													
10 TO 15	0.40	105.2	0													
15 TO 20	0.05	127.3	4													
20 TO 25	0.60	250.3	1													
25 TO 30	1.21	519.6	1													
30 TO 35	17.02	7000.0	20													
ABOVE 35	4.00	2000.0	13													
TOTAL	26.44	11244.0	119													



TABLE D210  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
MCQUIRE AFB, NEW JERSEY  
AND  
RHEIN MAIN AFB, GERMANY  
FOR THE  
MONTH OF APRIL

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.0	0																				
5 TO 10	0.00	0.0	0																				
10 TO 15	0.00	0.0	0																				
15 TO 20	0.10	35.3	0																				
20 TO 25	0.20	109.0	0																				
25 TO 30	0.20	85.0	0																				
30 TO 35	2.05	1183.6	0																				
ABOVE 35	7.37	3183.7	60																				
TOTAL	11.31	4596.6	60											1	21	37	1						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.05	6.3	17									1	5	5	5	1							
2 TO 5	0.16	35.6	29									4	6	9	6	2							
5 TO 10	0.11	36.1	9									1	5	4	1								
10 TO 15	0.15	49.5	9											3									
15 TO 20	0.00	0.0	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.00	0.0	0																				
30 TO 35	0.00	0.0	0																				
ABOVE 35	0.00	0.0	0																				
TOTAL	0.46	132.2	36									1	6	16	19	12	3	1					

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.05	6.3	17										1	5	5	1							
2 TO 5	0.16	35.6	29										4	0	9	4	2		1				
5 TO 10	0.11	36.1	9										1	5	4	1							
10 TO 15	0.15	49.5	9												3								
15 TO 20	0.10	35.3	0																				
20 TO 25	0.20	109.0	0																				
25 TO 30	0.20	85.0	0																				
30 TO 35	2.05	1183.6	0																				
ABOVE 35	7.37	3183.7	60																				
TOTAL	11.31	4596.6	110										1	1	6	37	56	13	3	1			

TABLE D211  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
MCQUIRE AFB, NEW JERSEY  
AND  
RHEIN MAIN AFB, GERMANY  
FOR THE  
MONTH OF MAY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.0	0																				
5 TO 10	0.00	0.0	0																				
10 TO 15	0.00	0.0	0																				
15 TO 20	1.27	494.9	1																				
20 TO 25	0.97	382.7	0																				
25 TO 30	0.74	319.0	22																				
30 TO 35	27.00	12210.7	24																				
ABOVE 35	7.23	3332.2	174																				
TOTAL	37.22	16764.6	231																				

STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	21.6	59								1	4	7	14	13	13	9						
1 TO 2	0.10	33.2	61									6	4	14	17	11	2	1	1				
2 TO 5	0.60	159.9	102										14	21	24	25	9	4					
5 TO 10	0.40	125.0	33									3	2	10	17								
10 TO 15	0.47	166.9	20											5	14	1							
15 TO 20	0.00	0.0	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.00	0.0	0																				
30 TO 35	0.00	0.0	0																				
ABOVE 35	0.00	0.0	0																				
TOTAL	1.78	407.6	279					1	1	1	13	27	60	89	50	17		7	1				

STORM PLUS NON-STORM

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
BELOW 1	0.12	21.6	59	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
1 TO 2	0.10	33.2	61							1	4	7	14	13	13	9							
2 TO 5	0.60	159.9	102									6	4	14	17	11	2	2	1				
5 TO 10	0.40	125.0	33										2	10	17								
10 TO 15	0.47	166.9	20											5	14	1							
15 TO 20	1.27	494.9	3												2	1							
20 TO 25	0.97	382.7	0												4	3							
25 TO 30	0.74	319.0	22													17							
30 TO 35	27.00	12210.7	24																				
ABOVE 35	7.23	3332.2	174																				
TOTAL	37.99	17291.0	506																				



TABLE D812  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
RESQUET AFB, NEW JERSEY  
AND  
RAEIN RAIN AFB, GERMANY  
FOR THE  
MONTH OF JUNE  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.02	2.7	0													
1 TO 2	0.02	2.7	0													
2 TO 5	0.02	2.7	0													
5 TO 10	0.02	2.7	0													
10 TO 15	0.02	2.7	0													
15 TO 20	0.02	2.7	0													
20 TO 25	0.02	2.7	0													
25 TO 30	0.02	2.7	0													
30 TO 35	0.02	2.7	0													
ABOVE 35	0.02	2.7	0													
TOTAL	0.02	2.7	0													

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.02	2.7	0													
1 TO 2	0.02	2.7	0													
2 TO 5	0.02	2.7	0													
5 TO 10	0.02	2.7	0													
10 TO 15	0.02	2.7	0													
15 TO 20	0.02	2.7	0													
20 TO 25	0.02	2.7	0													
25 TO 30	0.02	2.7	0													
30 TO 35	0.02	2.7	0													
ABOVE 35	0.02	2.7	0													
TOTAL	0.02	2.7	0													

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.02	2.7	0													
1 TO 2	0.02	2.7	0													
2 TO 5	0.02	2.7	0													
5 TO 10	0.02	2.7	0													
10 TO 15	0.02	2.7	0													
15 TO 20	0.02	2.7	0													
20 TO 25	0.02	2.7	0													
25 TO 30	0.02	2.7	0													
30 TO 35	0.02	2.7	0													
ABOVE 35	0.02	2.7	0													
TOTAL	0.02	2.7	0													

TABLE D813  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
RESQUET AFB, NEW JERSEY  
AND  
RAEIN RAIN AFB, GERMANY  
FOR THE  
MONTH OF JULY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.02	2.7	0													
1 TO 2	0.02	2.7	0													
2 TO 5	0.02	2.7	0													
5 TO 10	0.02	2.7	0													
10 TO 15	0.02	2.7	0													
15 TO 20	0.02	2.7	0													
20 TO 25	0.02	2.7	0													
25 TO 30	0.02	2.7	0													
30 TO 35	0.02	2.7	0													
ABOVE 35	0.02	2.7	0													
TOTAL	0.02	2.7	0													

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.02	2.7	0													
1 TO 2	0.02	2.7	0													
2 TO 5	0.02	2.7	0													
5 TO 10	0.02	2.7	0													
10 TO 15	0.02	2.7	0													
15 TO 20	0.02	2.7	0													
20 TO 25	0.02	2.7	0													
25 TO 30	0.02	2.7	0													
30 TO 35	0.02	2.7	0													
ABOVE 35	0.02	2.7	0													
TOTAL	0.02	2.7	0													

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.02	2.7	0													
1 TO 2	0.02	2.7	0													
2 TO 5	0.02	2.7	0													
5 TO 10	0.02	2.7	0													
10 TO 15	0.02	2.7	0													
15 TO 20	0.02	2.7	0													
20 TO 25	0.02	2.7	0													
25 TO 30	0.02	2.7	0													
30 TO 35	0.02	2.7	0													
ABOVE 35	0.02	2.7	0													
TOTAL	0.02	2.7	0													



TABLE DEL  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
REQUIRE AFB, NEW JERSEY  
AND  
RHEIN MAIN AFB, GERMANY  
FOR THE  
MONTH OF AUGUST  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.20	101.0	1											1									
20 TO 25	0.47	170.0	2											1	1								
25 TO 30	0.22	93.1	0																				
30 TO 35	12.76	9300.0	75																				
ABOVE 35	1.00	424.0	0										1	10	92	5	1						
TOTAL	14.74	6307.1	78										1	17	94	5	1						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.19	30.0	0																				
2 TO 5	0.42	110.0	5																				
5 TO 10	0.13	40.2	5																				
10 TO 15	0.15	49.3	2																				
15 TO 20	0.00	0.0	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.00	0.0	0																				
30 TO 35	0.00	0.0	0																				
ABOVE 35	0.00	0.0	0																				
TOTAL	0.95	247.0	10																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.19	30.0	0																				
2 TO 5	0.42	110.0	5																				
5 TO 10	0.13	40.2	5																				
10 TO 15	0.15	49.3	2																				
15 TO 20	0.20	101.0	1																				
20 TO 25	0.47	170.0	2																				
25 TO 30	0.22	93.1	0																				
30 TO 35	12.76	9300.0	75																				
ABOVE 35	1.00	424.0	0																				
TOTAL	15.09	6355.0	94																				

TABLE DELJ  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
REQUIRE AFB, NEW JERSEY  
AND  
RHEIN MAIN AFB, GERMANY  
FOR THE  
MONTH OF SEPTEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)			TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
						-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1						0.																			
1 TO 2						0.																			
2 TO 5						0.																			
5 TO 10						0.																			
10 TO 15						0.																			
15 TO 20						0.35										2		4							
20 TO 25						0.65											1		1						
25 TO 30						1.21												1		1					
30 TO 35						17.02										3	12	10	5						
ABOVE 35						4.00										1	3	7	2						
TOTAL						24.03										4	17	20	7						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	10.3	0																				
1 TO 2	0.10	17.0	17																				
2 TO 5	0.40	67.1	11																				
5 TO 10	0.62	104.0	27																				
10 TO 15	0.40	130.2	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.61	410.6	50																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	14.3	0																				
1 TO 2	0.10	17.0	17																				
2 TO 5	0.40	67.1	11																				
5 TO 10	0.62	104.0	27																				
10 TO 15	0.40	130.2	0																				
15 TO 20	0.35	127.3	4																				
20 TO 25	0.65	250.3	1																				
25 TO 30	1.21	515.0	1																				
30 TO 35	17.02	7054.0	36																				
ABOVE 35	4.00	2040.0	13																				
TOTAL	24.04	11244.6	110																				



TABLE D22a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
WAKE AIRPORT, WAKE ISLAND

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	3.	0																				
1 TO 2	0.	3.	0																				
2 TO 5	0.	3.	0																				
5 TO 10	1.	3.	0																				
10 TO 15	0.	3.	0																				
15 TO 20	1.31	403.3	7								1		4	2									
20 TO 25	4.25	1704.4	216								5	17	73	101	17	5							
25 TO 30	3.77	1613.2	14									1	4	9									
30 TO 35	11.69	5367.2	6										1	4	1								
ABOVE 35	11.16	22825.4	223								1	7	15	91	82	24	1			1	1		
TOTAL	72.10	31693.5	466								1	11	31	175	190	42	6			1	1		

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	GUST DISTRIBUTION (FT./SEC.)												
											-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.50	64.7	64							1	2	9	8	13	23	7	1						
1 TO 2	0.74	117.1	65			1					7	7	14	20	11	7	5						
2 TO 5	1.73	305.9	106					1			4	12	31	46	10	7							
5 TO 10	1.14	366.4	40								2	4	16	16	1	1							
10 TO 15	1.20	412.1	11										1	9	1								
15 TO 20	0.5	3.0	0																				
20 TO 25	0.33	13.4	1												1								
25 TO 30	0.37	20.2	0																				
30 TO 35	0.05	21.5	0																				
ABOVE 35	1.09	850.4	0																				
TOTAL	7.43	2397.7	287		1		1		1	8	32	70	105	46	17	6							

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.50	64.7	64								1	2	9	0	13	23	7	1					
1 TO 2	1.74	117.1	65			1						7	14	20	11	7	5						
2 TO 5	1.73	305.9	106					1				4	12	31	46	10	2						
5 TO 10	1.14	366.4	40									2	4	16	16	1	1						
10 TO 15	1.20	410.1	11											1	9	1							
15 TO 20	1.31	403.3	7									1		4	2								
20 TO 25	4.20	1717.0	217									3	17	73	102	17	9						
25 TO 30	3.04	1630.4	14											1	4								
30 TO 35	11.74	5368.7	6												1	4	1						
ABOVE 35	13.35	23675.0	223									1	7	13	93	82	24	1			1	1	
TOTAL	79.62	33940.2	753			1		1			2	19	63	245	303	60	23	6			1	1	

TABLE D22b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS																							
			GUST DISTRIBUTION (FT./SEC.)																				
ALTITUDE	TIME	NAUTICAL	TOTAL	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
(1000 FT.)	(HOURS)	MILES	PEAKS																				
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.13	417.5	6								1		3	2									
20 TO 25	4.05	1624.6	216								5	17	75	101	17	5							
25 TO 30	3.42	1462.0	6									1											
30 TO 35	10.10	4622.7	6											4	1								
ABOVE 35	42.05	18069.4	223																				
TOTAL	67.03	26797.1	457								1	11	93	172	246	1							
												11	31	172	42	6							

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.53	75.9	63							1	2	9	8	13	23	6	1						
1 TO 2	0.67	109.6	64			1						7	13	20	11	7	9						
2 TO 5	1.59	353.2	104					1			3	12	30	46	10	2							
5 TO 10	0.99	303.7	20								2		10	14	1	1							
10 TO 15	1.24	356.1	11										1	9	1								
15 TO 20	0.5	3.0	0																				
20 TO 25	0.35	13.4	1												1								
25 TO 30	0.37	20.2	0																				
30 TO 35	0.05	21.5	0																				
ABOVE 35	1.09	850.4	0																				
TOTAL	6.07	2134.9	271			1		1		1	7	20	62	103	46	14	6						

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.53	75.9	63								1	2	9	6	13	23	6	1					
1 TO 2	0.67	109.6	64			1						7	13	20	11	7	5						
2 TO 5	1.59	353.2	104					1			3	12	30	46	10	2							
5 TO 10	0.99	303.7	20								2	10	14	1	1								
10 TO 15	1.04	356.1	11										1	9									
15 TO 20	1.13	417.5	6								1		3	2									
20 TO 25	4.00	1639.1	217								5	17	73	101	17	5							
25 TO 30	3.40	1491.0	6									1	2	5									
30 TO 35	10.23	4644.1	6										1	4	1								
ABOVE 35	43.03	19719.0	223								1	7	13	93	82	24	1			1	1		
TOTAL	67.70	26902.0	720			1		1			2	10	59	234	295	60	22	6		1	1		



TABLE D22c  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
NICKAM AFB, HAWAII  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
SPRING SEASON

				NON-STORM CONDITIONS													
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)													
BELOW 1	0.02	0.	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5
1 TO 2	0.	0.	0														
2 TO 5	0.	0.	0														
5 TO 10	0.	0.	0														
10 TO 15	0.	0.	0														
15 TO 20	0.04	14.9	0														
20 TO 25	0.07	20.1	0														
25 TO 30	0.14	59.1	2														
30 TO 35	0.02	34.8	0														
ABOVE 35	3.90	1652.6	0														
TOTAL	4.97	2094.5	2														

				STORM CONDITIONS													
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)													
BELOW 1	0.02	2.5	1	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5
1 TO 2	0.01	1.4	0														
2 TO 5	0.03	7.4	1														
5 TO 10	0.04	12.9	6														
10 TO 15	0.04	14.0	0														
15 TO 20	0.	0.	0														
20 TO 25	0.	0.	0														
25 TO 30	0.	0.	0														
30 TO 35	0.	0.	0														
ABOVE 35	0.	0.	0														
TOTAL	0.14	36.5	8														

				STORM PLUS NON-STORM													
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)													
BELOW 1	0.02	2.5	1	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5
1 TO 2	0.01	1.4	0														
2 TO 5	0.03	7.4	1														
5 TO 10	0.04	12.9	6														
10 TO 15	0.04	14.0	0														
15 TO 20	0.07	20.1	0														
20 TO 25	0.07	20.1	0														
25 TO 30	0.14	59.1	2														
30 TO 35	0.02	34.8	0														
ABOVE 35	3.90	1652.6	0														
TOTAL	5.11	2136.9	10														

TABLE D22d  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
NICKAM AFB, HAWAII  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
SUMMER SEASON

				NON-STORM CONDITIONS													
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)													
BELOW 1	0.	0.	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5
1 TO 2	0.	0.	0														
2 TO 5	0.	0.	0														
5 TO 10	0.	0.	0														
10 TO 15	0.	0.	0														
15 TO 20	0.09	32.2	0														
20 TO 25	0.06	25.1	0														
25 TO 30	0.09	30.1	2														
30 TO 35	0.50	257.4	0														
ABOVE 35	3.47	1526.6	0														
TOTAL	4.30	1879.4	2														

				STORM CONDITIONS													
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)													
BELOW 1	0.02	3.7	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5
1 TO 2	0.05	6.6	1														
2 TO 5	0.07	17.6	1														
5 TO 10	0.07	20.9	0														
10 TO 15	0.07	25.4	0														
15 TO 20	0.	0.	0														
20 TO 25	0.	0.	0														
25 TO 30	0.	0.	0														
30 TO 35	0.	0.	0														
ABOVE 35	0.	0.	0														
TOTAL	0.20	75.0	2														

				STORM PLUS NON-STORM													
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)													
BELOW 1	0.02	3.7	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5
1 TO 2	0.05	6.6	1														
2 TO 5	0.07	17.6	1														
5 TO 10	0.07	20.9	0														
10 TO 15	0.07	25.4	0														
15 TO 20	0.09	32.2	0														
20 TO 25	0.06	25.1	0														
25 TO 30	0.09	30.1	2														
30 TO 35	0.50	257.4	0														
ABOVE 35	3.47	1526.6	0														
TOTAL	4.30	1879.4	4														



TABLE D23  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
AUTUMN SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.05	10.7	1											1									
20 TO 25	0.07	20.6	0																				
25 TO 30	0.12	90.1	4											1	3								
30 TO 35	0.10	43.3	0																				
ABOVE 35	1.74	776.8	0																				
TOTAL	2.08	915.5	5											2	3								

STORM CONDITIONS

			WIDE DISTRIBUTION (FT./SEC.)																				
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	2.5	0																				
1 TO 2	0.01	1.5	0																				
2 TO 5	0.03	7.5	0																				
5 TO 10	0.04	12.3	4										3	1	2								
10 TO 15	0.04	10.6	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.13	30.4	4										3	1	2								

STORM PLUS NON-STORM

				WIDE DISTRIBUTION (FT./SEC.)																			
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	2.5	0																				
1 TO 2	0.01	1.5	0																				
2 TO 5	0.03	7.5	0																				
5 TO 10	0.04	12.3	4										5	1	2								
10 TO 15	0.04	10.6	0																				
15 TO 20	0.05	10.7	0											1									
20 TO 25	0.07	20.6	0																				
25 TO 30	0.12	90.1	4																				
30 TO 35	0.10	43.3	0											1	3								
ABOVE 35	1.74	776.8	0																				
TOTAL	2.21	953.9	11										5	3	5								

TABLE D22  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
MONTH OF JANUARY

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.48	176.2	2												1	1							
20 TO 25	3.42	1378.5	204										3	16	68	97	15	5					
25 TO 30	2.62	1127.4	2													2							
30 TO 35	4.72	2062.3	3												1	2							
ABOVE 35	17.96	8017.7	5												3	2							
TOTAL	29.21	12781.9	216										3	16	73	104	15	5					

STORM CONDITIONS

				WIDE DISTRIBUTION (FT./SEC.)																			
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.24	35.5	29									2	4	3	7	9	4						
1 TO 2	0.32	51.1	24				1						3	5	7	4	1	1					
2 TO 5	0.62	147.0	26										2	9	14	1							
5 TO 10	0.43	135.0	14											5	7	1	1						
10 TO 15	0.48	166.0	2												1	1							
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	2.10	536.2	95				1						2	9	22	36	18	6	1				

STORM PLUS NON-STORM

				WIDE DISTRIBUTION (FT./SEC.)																			
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.24	35.5	29										2	4	3	7	9	4					
1 TO 2	0.32	51.1	24				1						3	5	7	6	1	1					
2 TO 5	0.62	147.0	26										2	9	14	1							
5 TO 10	0.43	135.0	14											5	7	1	1						
10 TO 15	0.48	166.0	2												1	1							
15 TO 20	0.48	176.2	2												1	1							
20 TO 25	3.42	1378.5	204										3	16	68	97	15	5					
25 TO 30	2.62	1127.4	2													2							
30 TO 35	4.72	2062.3	3													1	2						
ABOVE 35	17.96	8017.7	5													3	2						
TOTAL	31.53	13318.2	311				1						5	25	95	140	33	11	1				



TABLE D22a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
MONTH OF FEBRUARY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.24	87.5	0																				
20 TO 25	0.22	87.4	0										1	1	2	2							
25 TO 30	0.22	94.2	0																				
30 TO 35	4.71	2011.6	0																				
ABOVE 35	4.28	1919.7	2												2								
TOTAL	9.67	4292.4	12										1	3	4	2							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.14	20.1	5											2	2		1						
1 TO 2	0.12	20.0	10										1	3	4	1	1						
2 TO 5	0.33	70.3	36						1			1	5	11	15	3							
5 TO 10	0.18	54.1	7								1			3	3								
10 TO 15	0.22	68.0	9											1	8								
15 TO 20	0.	0.	0																				
20 TO 25	0.03	19.4	1												1								
25 TO 30	0.27	28.2	0																				
30 TO 35	0.05	21.5	0																				
ABOVE 35	1.89	852.4	0																				
TOTAL	3.32	1146.8	68				1				2	6	18	33	6	1	1						

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1		25.1	5												2	2							
1 TO 2	0.12	20.0	10										1	3	4	1	1						
2 TO 5	0.33	70.3	36					1			1	9	11	15	3		1						
5 TO 10	0.18	54.1	7								1			3	3								
10 TO 15	0.22	68.0	9											1	8								
15 TO 20	0.24	87.5	0																				
20 TO 25	0.26	105.8	9										1	3	3	2							
25 TO 30	0.29	122.4	0																				
30 TO 35	4.76	2033.1	0																				
ABOVE 35	6.17	2770.1	2												2								
TOTAL	12.69	5347.2	70				1				2	7	21	37	6	1	1						

TABLE D22b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
MONTH OF APRIL  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.04	14.9	0																				
20 TO 25	0.07	28.1	0																				
25 TO 30	0.14	59.1	2																				
30 TO 35	0.82	343.8	0																				
ABOVE 35	3.99	1632.4	0																				
TOTAL	4.97	2098.5	2																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	2.5	1																				
1 TO 2	0.21	1.4	0																				
2 TO 5	0.03	7.6	1																				
5 TO 10	0.24	12.9	4								1												
10 TO 15	0.24	14.0	0										1	5									
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.14	38.5	8								1	1	5			1							

STORM PLUS NON-STORM

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.2	2.5	1																				
1 TO 2	0.21	1.4	0																				
2 TO 5	0.23	7.6	1																				
5 TO 10	0.24	12.9	4																				
10 TO 15	0.24	14.0	0																				
15 TO 20	0.24	14.0	0																				
20 TO 25	0.27	28.1	0																				
25 TO 30	0.14	59.1	2																				
30 TO 35	0.82	343.8	0																				
ABOVE 35	3.99	1632.4	0																				
TOTAL	5.11	2136.9	10																				



TABLE D221  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
MONTH OF JUNE  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.09	32.2	0																				
20 TO 25	0.06	25.1	0																				
25 TO 30	0.09	38.1	2											1	1								
30 TO 35	0.09	257.4	0																				
ABOVE 35	3.47	5.6	0																				
TOTAL	4.10	4.4	2											1	1								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	3.7	0																				
1 TO 2	0.05	4.6	1											1									
2 TO 5	0.07	17.6	1											1									
5 TO 10	0.07	20.5	0																				
10 TO 15	0.07	25.4	0																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	0.29	75.9	2											2									

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	3.7																					
1 TO 2	0.05	4.6	1										1										
2 TO 5	0.07	17.6	1										1										
5 TO 10	0.07	20.5	0																				
10 TO 15	0.07	25.4	0																				
15 TO 20	0.09	32.2	0																				
20 TO 25	0.06	25.1	0																				
25 TO 30	0.09	38.1	2											1	1								
30 TO 35	0.09	257.4	0																				
ABOVE 35	3.47	1576.6	0																				
TOTAL	4.59	1450.3	4											1	1								

TABLE D222  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
MONTH OF NOVEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.05	18.7	1											1									
20 TO 25	0.07	26.6	0																				
25 TO 30	0.12	55.1	4											1	3								
30 TO 35	0.10	43.3	0																				
ABOVE 35	1.74	776.8	0																				
TOTAL	2.34	915.5	5											2	3								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDF DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	2.5	0																				
1 TO 2	0.01	1.5	0																				
2 TO 5	0.03	7.5	0																				
5 TO 10	0.04	12.3	6											3	1	2							
10 TO 15	0.04	14.6	0																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	0.13	38.4	6											3	1	2							

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	2.5	0																				
1 TO 2	0.01	1.5	0																				
2 TO 5	0.03	7.5	0																				
5 TO 10	0.04	12.3	6										3	1	2								
10 TO 15	0.04	14.6	0																				
15 TO 20	0.05	18.7	1											1									
20 TO 25	0.07	26.6	0																				
25 TO 30	0.12	55.1	4																				
30 TO 35	0.10	43.3	0											1	3								
ABOVE 35	1.74	776.8	0																				
TOTAL	2.21	953.9	11										3	1	5								



TABLE D22  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
NICKAN AFB, HAWAII  
AND  
WAKE AIRPORT, WAKE ISLAND  
FOR THE  
MONTH OF DECEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.42	153.0	4								1		2	1									
20 TO 25	0.40	150.0	4									1	2	2									
25 TO 30	0.57	241.3	4											2	1								
30 TO 35	0.74	320.0	3																				
ABOVE 35	19.81	6932.1	214							1	7	13	90	70	24	1				1	1		
TOTAL	21.94	9814.0	231							1	8	14	96	84	29	1				1	1		

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	20.3	29							1		5	5	4	12	2							
1 TO 2	0.23	34.5	30									3	5	9	4	5	4						
2 TO 5	0.64	135.1	42								2	5	10	17	6	2							
5 TO 10	0.38	111.6	7								1		2	4									
10 TO 15	0.36	120.4	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.76	421.0	108								1	3	13	22	34	22	9	4					

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	20.3	29								1		5	5	4	12	2						
1 TO 2	0.23	34.5	30									2	5	10	17	6	2						
2 TO 5	0.64	135.1	42								1		2	4									
5 TO 10	0.38	111.6	7																				
10 TO 15	0.36	120.4	0																				
15 TO 20	0.42	153.0	4								1		2	2									
20 TO 25	0.40	150.0	4										2	2									
25 TO 30	0.57	241.3	4										1	2	1								
30 TO 35	0.74	320.0	3																				
ABOVE 35	19.81	6932.1	214							1	7	13	90	70	24	1				1	1		
TOTAL	23.70	10236.0	330							2	11	27	110	110	47	10	4			1	1		



TABLE D23a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
CLARK AB, PHILIPPINES

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.24	449.7	30									2	3	13	8	2	1						
20 TO 25	1.71	669.9	42									2	15	21	4								
25 TO 30	11.16	4379.2	107								3	3	4	35	54		4						
30 TO 35	39.10	16654.0	160								3	12	63	65	10	5	1	1					
ABOVE 35	75.12	33252.3	107									2	51	49	5								
TOTAL	128.13	55404.9	446								3	8	23	177	197	25	6	5	1	1			

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.32	62.9	61																				
1 TO 2	0.42	66.5	125								1	4	12	26	27	33	14	4					
2 TO 5	1.51	313.6	213																				
5 TO 10	1.25	370.2	69							1	4	14	74	80	26	9	2						
10 TO 15	1.20	405.4	46									4	8	12	33	6	4	2					
15 TO 20	0.	0.	0										3	17	10	7	1						
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	1.27	569.6	2											1	1								
TOTAL	5.94	1766.2	516							1	1	5	14	51	137	171	87	34	12	2	1		

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DIRECTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.32	42.9	61																				
1 TO 2	0.42	66.5	125																				
2 TO 5	1.51	313.6	213																				
5 TO 10	1.25	370.2	69																				
10 TO 15	1.20	405.4	46																				
15 TO 20	1.24	449.7	30																				
20 TO 25	1.71	669.9	42																				
25 TO 30	11.16	4379.2	107																				
30 TO 35	39.10	16654.0	160																				
ABOVE 35	76.39	33421.9	109																				
TOTAL	154.27	57173.2	962																				

TABLE D23b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 4	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.52	189.2	18								2	3	4	5	2	1						1	
20 TO 25	0.72	281.4	4										2	2									
25 TO 30	9.93	3683.0	29									1	6	22									
30 TO 35	14.55	6097.9	46										19	23	2	1	1						
ABOVE 35	21.91	9796.8	35										2	17	14	7							
TOTAL	47.63	20248.2	132								2	6	19	46	6	2	1					1	

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.13	19.3	20																				
1 TO 2	0.17	26.5	51																				
2 TO 5	0.74	153.2	104																				
5 TO 10	0.50	170.7	13																				
10 TO 15	0.49	165.7	39																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	2.10	515.4	227																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.13	19.3	20																				
1 TO 2	0.17	26.5	51									1	9	9	15	13	5	2	2				
2 TO 5	0.74	153.2	104									1	7	31	46	14	3	1				1	
5 TO 10	0.50	170.7	13									1	3	7	1								
10 TO 15	0.49	165.7	39									3	14	15	6	1							
15 TO 20	0.52	189.2	18									2	3	4	5	2	1						
20 TO 25	0.72	281.4	4											2	2								
25 TO 30	9.93	3683.0	29											1	6	22							
30 TO 35	14.55	6097.9	46												19	23							
ABOVE 35	21.91	9796.8	35												2	17	14	2					
TOTAL	49.73	20783.6	359									1	1	4	26	109	153	44	13	6			2



TABLE D23c  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.22	82.1	4											4									
20 TO 25	0.26	101.5	14											3	9								
25 TO 30	0.28	119.4	73																				
30 TO 35	5.60	2504.1	1								3	3	3	26	30	4		4					
ABOVE 35	18.39	8149.4	17											1									
														7	8	2							
TOTAL	24.76	10932.5	109								3	3	3	43	47	6		4					

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.25	6.9	10																				
1 TO 2	0.23	9.0	2																				
2 TO 5	0.16	34.1	22																				
5 TO 10	0.16	48.3	14																				
10 TO 15	0.22	74.7	3																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.61	169.2	51																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.25	6.9	10																				
1 TO 2	0.23	9.0	2																				
2 TO 5	0.16	34.1	22																				
5 TO 10	0.16	48.3	14																				
10 TO 15	0.22	74.7	3																				
15 TO 20	0.22	82.1	4																				
20 TO 25	0.26	101.5	14																				
25 TO 30	0.28	119.4	73																				
30 TO 35	5.60	2504.1	1																				
ABOVE 35	18.39	8149.4	17																				
TOTAL	25.38	11121.5	160																				

TABLE D23d  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.22	81.4	2																				
20 TO 25	0.26	99.6	24																				
25 TO 30	0.27	113.0	3																				
30 TO 35	4.98	2069.0	2																				
ABOVE 35	22.69	10066.6	38																				
TOTAL	26.23	12496.4	69																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.25	6.9	25								1	7	2	5	7	1	2						
1 TO 2	0.19	25.1	69								1	2	7	15	7	19	9	2	2				
2 TO 5	0.31	66.0	61				1				2	3	5	21	15	9	5	1					
5 TO 10	0.25	77.9	40								4	6	4	17	4	6	1						
10 TO 15	0.23	79.4	5																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	1.27	169.6	2										1		1								
TOTAL	2.26	326.9	193				1			3	10	25	43	45	39	19	6	2					

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.25	6.9	25									1	7	2	5	7	1	2						
1 TO 2	0.19	25.1	65				1				1	2	7	15	7	19	9	2						
2 TO 5	0.31	66.0	61								2	3	5	21	15	9	5	1						
5 TO 10	0.25	77.9	40								4	6	4	6	17	4	4	1						
10 TO 15	0.23	79.4	5																					
15 TO 20	0.22	81.4	2											1	1									
20 TO 25	0.26	99.6	24										2	8	10	4								
25 TO 30	0.27	113.0	3											2	1									
30 TO 35	4.98	2069.0	2										1			1								
ABOVE 35	24.15	10066.6	40											21	10	1								
TOTAL	30.69	13281.3	262				1		3	10	20	74	74	45	19	6	2							



TABLE D23a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
MICKAM AFB, HAWAII  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
AUTUMN SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDF DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.27	96.9	6											4	2								
20 TO 25	0.47	187.3	0																				
25 TO 30	0.67	266.8	2																				
30 TO 35	14.36	5986.2	111											1	1								
ABOVE 35	11.93	5219.5	17																				
TOTAL	27.71	11747.8	136											3	11	43	42	7	4		1		

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	9.9	6													2	2						
1 TO 2	0.06	9.9	7											2	5								
2 TO 5	0.30	63.2	26										1	12	11	1	1						
5 TO 10	0.26	73.2	2											1	1								
10 TO 15	0.26	85.6	4											1	1								
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.96	238.9	45										1	18	20	3	3						

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	9.9	6													2	2						
1 TO 2	0.06	9.9	7											2	5								
2 TO 5	0.30	63.2	26										1	12	11	1	1						
5 TO 10	0.26	73.2	2											1	1								
10 TO 15	0.26	85.6	4												1								
15 TO 20	0.27	96.9	6												4	2							
20 TO 25	0.47	187.3	0																				
25 TO 30	0.67	266.8	2																				
30 TO 35	14.36	5986.2	111									3	11	43	42	7	4		1				
ABOVE 35	11.93	5219.5	17											7	10								
TOTAL	28.66	11986.7	181										3	12	73	75	10	7		1			

TABLE D23f  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
MICKAM AFB, HAWAII  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
MONTH OF JANUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.36	131.1	16									2	3	2	5	2	1						
20 TO 25	0.51	200.6	0																				
25 TO 30	3.85	1940.9	0																				
30 TO 35	10.13	4137.6	18											5	12	1							
ABOVE 35	16.18	7194.2	16											1	6	7	2						
TOTAL	31.03	13204.5	50									2	4	13	24	5	1						

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	10.7	11																				
1 TO 2	0.12	19.3	23										1	2	4	5	6	3	1				
2 TO 5	0.51	105.7	32										1	2	4	5	6	3	1				
5 TO 10	0.41	120.3	6										3	10	12	3	2	1					
10 TO 15	0.34	115.1	2											3	3								
15 TO 20	0.	0.	0											1	1								
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.46	371.1	74									1	7	19	25	12	6	2				1	

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	10.7	11																				
1 TO 2	0.12	19.3	23																				
2 TO 5	0.51	105.7	32																				
5 TO 10	0.41	120.3	6																				
10 TO 15	0.34	115.1	2																				
15 TO 20	0.36	131.1	16																				
20 TO 25	0.51	200.6	0																				
25 TO 30	3.85	1940.9	0																				
30 TO 35	10.13	4137.6	18																				
ABOVE 35	16.18	7194.2	16																				
TOTAL	32.49	13575.6	124																				



TABLE D15  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
MONTH OF MARCH  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)											
BELOW 1	0.	0.	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5
1 TO 2	0.	0.	0												
2 TO 5	0.	0.	0												
5 TO 10	0.	0.	0												
10 TO 15	0.	0.	0												
15 TO 20	0.37	24.0	3												
20 TO 25	0.07	26.0	0												
25 TO 30	0.30	35.1	10												
30 TO 35	1.78	797.6	0												
ABOVE 35	3.06	1703.0	0												
TOTAL	5.86	2585.0	21											11	10

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)											
BELOW 1	0.02	2.6	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5
1 TO 2	0.	0.	0												
2 TO 5	0.37	5.2	1												
5 TO 10	0.64	12.6	0												
10 TO 15	0.39	16.9	0												
15 TO 20	0.	0.	0												
20 TO 25	0.	0.	0												
25 TO 30	0.	0.	0												
30 TO 35	0.	0.	0												
ABOVE 35	0.	0.	0												
TOTAL	0.13	37.3	1												

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)											
BELOW 1	0.32	2.6	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5
1 TO 2	0.	0.	0												
2 TO 5	0.32	5.2	1												
5 TO 10	0.64	12.6	0												
10 TO 15	0.39	16.9	0												
15 TO 20	0.07	24.0	3												
20 TO 25	0.37	26.0	0												
25 TO 30	0.30	35.1	10												
30 TO 35	1.78	797.6	0												
ABOVE 35	3.06	1703.0	0												
TOTAL	5.99	2623.1	22											12	10

TABLE D25  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
MONTH OF APRIL  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)											
BELOW 1	0.	0.	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5
1 TO 2	0.	0.	0												
2 TO 5	0.	0.	0												
5 TO 10	0.	0.	0												
10 TO 15	0.	0.	0												
15 TO 20	0.10	36.5	1												
20 TO 25	0.12	49.2	0												
25 TO 30	0.12	49.1	0												
30 TO 35	3.34	1492.0	1												
ABOVE 35	5.75	2512.7	8												
TOTAL	9.43	4139.5	10											2	4

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)											
BELOW 1	0.3	4.3	10	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5
1 TO 2	0.1	1.5	2												
2 TO 5	0.11	20.5	12												
5 TO 10	0.37	22.1	10												
10 TO 15	0.10	36.1	0												
15 TO 20	0.10	36.5	1												
20 TO 25	0.12	49.2	0												
25 TO 30	0.12	49.1	0												
30 TO 35	3.34	1492.0	1												
ABOVE 35	5.75	2512.7	8												
TOTAL	9.32	4223.9	34											1	1

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)											
BELOW 1	0.33	4.3	10	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5
1 TO 2	0.31	1.5	2												
2 TO 5	0.11	20.5	12												
5 TO 10	0.37	22.1	10												
10 TO 15	0.10	36.1	0												
15 TO 20	0.10	36.5	1												
20 TO 25	0.12	49.2	0												
25 TO 30	0.12	49.1	0												
30 TO 35	3.34	1492.0	1												
ABOVE 35	5.75	2512.7	8												
TOTAL	9.76	4222.0	44											1	1



TABLE B2B  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
MONTH OF MAY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.06	21.6	0																				
20 TO 25	0.07	26.4	14																				
25 TO 30	0.08	35.1	55																				
30 TO 35	0.40	214.9	0																				
ABOVE 35	0.70	3929.6	9																				
TOTAL	0.47	4227.2	70																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	GSE DISTRIBUTION (FT./SEC.)																			
			-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0	0																			
1 TO 2	0.02	3.2	0																			
2 TO 5	0.33	8.4	9										5	4								
5 TO 10	0.04	13.6	4										2	2								
10 TO 15	0.07	23.7	3											2	1							
15 TO 20	0.	0.	0																			
20 TO 25	0.	0.	0																			
25 TO 30	0.	0.	0																			
30 TO 35	0.	0.	0																			
ABOVE 35	0.	0.	0																			
TOTAL	0.16	49.2	16										7	6	1							

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1			0																				
1 TO 2	0.32	3.2	0																				
2 TO 5	0.03	8.4	9											5	4								
5 TO 10	0.04	13.6	4											2	2								
10 TO 15	0.07	23.7	3													1							
15 TO 20	0.34	21.6	0																				
20 TO 25	0.27	26.4	14											5	9								
25 TO 30	0.38	35.1	55																				
30 TO 35	0.40	214.9	0																				
ABOVE 35	0.70	3929.6	9																				
TOTAL	0.63	4276.5	94											3	3	3	35	41	5				4

TABLE D2B  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
MONTH OF JULY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.22	81.4	2											1	1								
20 TO 25	0.26	99.6	24										2	9	10	4							
25 TO 30	0.27	113.0	3											2	1								
30 TO 35	4.50	2065.0	2										1			1							
ABOVE 35	27.89	10096.6	30												20	17	1						
TOTAL	28.23	12456.4	69										3	31	29	6							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	6.0	25																				
1 TO 2	0.15	25.1	65																				
2 TO 5	0.31	66.0	61																				
5 TO 10	0.25	77.9	40																				
10 TO 15	0.23	79.4	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	1.27	569.6	2																				
TOTAL	2.26	824.9	193																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	6.0	25																				
1 TO 2	0.15	25.1	65																				
2 TO 5	0.31	66.0	61																				
5 TO 10	0.25	77.9	40																				
10 TO 15	0.23	79.4	0																				
15 TO 20	0.22	81.4	2																				
20 TO 25	0.26	99.6	24																				
25 TO 30	0.27	113.0	3																				
30 TO 35	4.50	2065.0	2																				
ABOVE 35	24.15	10466.2	40																				
TOTAL	30.49	13281.9	262																				



TABLE D21  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
MONTH OF NOVEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.27	96.9	6										4	2									
20 TO 25	0.47	187.3	0																				
25 TO 30	0.67	266.8	2																				
30 TO 35	14.36	5986.2	111									3	11	43	42	7	4		1				
ABOVE 35	11.93	5210.5	17											7	10								
TOTAL	27.71	11747.6	136									3	11	55	55	7	4		1				

STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.37	9.9	6											2	2	2							
1 TO 2	0.36	9.9	7											2	5								
2 TO 5	0.30	60.2	26										1	12	11	1	1						
5 TO 10	0.26	75.2	2											1	1								
10 TO 15	0.26	85.6	4											3	1								
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.96	230.9	45										1	10	20	3	3						

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.7	9.9	6											2	2	2	2						
1 TO 2	0.66	9.9	7											2	5								
2 TO 5	0.30	60.2	26										1	12	11	1	1						
5 TO 10	0.26	75.2	2											1	1								
10 TO 15	0.26	85.4	4											3	1								
15 TO 20	0.27	96.9	6											4	2								
20 TO 25	0.47	187.3	0																				
25 TO 30	0.67	266.8	2											1	1								
30 TO 35	14.36	5986.2	111										3	11	43	42	7	4		1			
ABOVE 35	11.93	5210.5	17											7	10								
TOTAL	20.66	11966.7	181										3	12	75	75	13	7		1			

TABLE D21  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
MONTH OF DECEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.16	50.1	2											2									
20 TO 25	0.21	60.8	4											2	2								
25 TO 30	0.08	2339.0	29										1	6	22								
30 TO 35	4.42	1963.3	28											14	11	1	1	1					
ABOVE 35	5.72	2605.5	19											1	11	7							
TOTAL	16.59	7043.7	82											2	39	42	1	1	1				

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	8.6	9										1	2	3		1	1	1				
1 TO 2	0.36	7.2	20											3	5	10	7	2	1				
2 TO 5	0.23	47.6	72								1			4	21	34	11	1	1				
5 TO 10	0.17	52.3	7											1	4	1				1			
10 TO 15	0.15	53.6	37											3	13	14	6	1	1				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.65	164.3	155								1	1	13	42	62	26	5	3					

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	8.6	9									1	2	3	1	1	1						
1 TO 2	0.04	7.2	20										3	5	10	7	2	1					
2 TO 5	0.23	47.6	72								1	4	21	34	11	1	1						
5 TO 10	0.17	52.3	7										1	4	1			1					
10 TO 15	0.15	53.6	37										3	13	14	6	1						
15 TO 20	0.16	50.1	2																				
20 TO 25	0.21	60.8	4											2	2								
25 TO 30	0.08	2339.0	29												6	22							
30 TO 35	4.42	1963.3	28												14	11	1	1	1				
ABOVE 35	5.72	2605.5	19												1	11	7						
TOTAL	17.24	7200.1	235								1	1	19	77	104	27	6	4					



TABLE D24a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
ANDERSON AB, GUAM

NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.03	373.2	12																				
20 TO 25	3.99	1577.7	473																				
25 TO 30	5.95	2393.4	446																				
30 TO 35	20.13	8747.2	17																				
ABOVE 35	62.17	27936.0	770																				
TOTAL	93.27	41027.6	1660																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	103																				
1 TO 2	0.00	129.7	109																				
2 TO 5	2.23	382.5	142																				
5 TO 10	0.01	275.5	16																				
10 TO 15	0.03	312.5	7																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	5.25	1152.3	377																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	56.0	103																				
1 TO 2	0.00	129.7	109																				
2 TO 5	2.23	382.5	142																				
5 TO 10	0.01	275.5	16																				
10 TO 15	0.03	312.5	7																				
15 TO 20	1.03	373.2	12																				
20 TO 25	3.99	1577.7	473																				
25 TO 30	5.95	2393.4	446																				
30 TO 35	20.13	8747.2	17																				
ABOVE 35	62.17	27936.0	770																				
TOTAL	96.32	42170.6	2645																				

TABLE D24b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
ANDERSON AB, GUAM  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.44	159.2	1																				
20 TO 25	0.57	223.6	28																				
25 TO 30	1.56	664.7	0																				
30 TO 35	4.30	1876.5	1																				
ABOVE 35	32.96	15062.9	557																				
TOTAL	39.82	17986.9	587																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	32.0	43																				
1 TO 2	0.43	71.0	46																				
2 TO 5	0.88	172.2	60																				
5 TO 10	0.38	115.3	8																				
10 TO 15	0.40	133.2	4																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	2.30	521.0	161																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	32.0	43																				
1 TO 2	0.43	71.0	46																				
2 TO 5	0.88	170.2	60																				
5 TO 10	0.38	115.3	8																				
10 TO 15	0.40	133.2	4																				
15 TO 20	0.44	159.2	1																				
20 TO 25	0.57	223.6	28																				
25 TO 30	1.56	664.7	0																				
30 TO 35	4.30	1876.5	1																				
ABOVE 35	32.96	15062.9	557																				
TOTAL	42.13	18906.7	748																				



TABLE D244  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
ANDERSON AB, GUAM  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	15.2	44																				
1 TO 2	0.31	47.4	50																				
2 TO 5	1.33	181.2	63																				
5 TO 10	0.35	105.8	7																				
10 TO 15	0.35	110.6	2																				
15 TO 20	0.38	139.4	9										4	3	2								
20 TO 25	0.50	193.6	13										6	5	2								
25 TO 30	1.35	225.9	17							1		3	2	7	1		2	1					
30 TO 35	9.36	965.7	16										5	10	1								
ABOVE 35	22.46	9951.6	64										4	15	41	4							
TOTAL	32.95	14472.4	119							1		7	32	66	10	2	1						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	15.2	44					1	1														
1 TO 2	0.31	47.4	50								1	5	14	12	10	3	2	1	2	1	1		
2 TO 5	1.33	181.2	63				1		2			11	16	18	0	5	1		1				
5 TO 10	0.35	105.8	7										3	3									
10 TO 15	0.35	110.6	2								1			1									
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	2.14	468.2	166				1	1	3	2	4	22	40	41	22	18	6	2	3	2	1		

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	15.2	44																				
1 TO 2	0.31	47.4	50																				
2 TO 5	1.33	181.2	63																				
5 TO 10	0.35	105.8	7																				
10 TO 15	0.35	110.6	2																				
15 TO 20	0.35	110.6	9																				
20 TO 25	0.50	197.6	13																				
25 TO 30	0.55	225.0	17																				
30 TO 35	0.55	905.7	116																				
ABOVE 35	22.40	9951.6	64																				
TOTAL	35.39	14940.6	285																				

TABLE D244  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
ANDERSON AB, GUAM  
FOR THE  
AUTUMN SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	15.2	44																				
1 TO 2	0.31	47.4	50																				
2 TO 5	1.33	181.2	63																				
5 TO 10	0.35	105.8	7																				
10 TO 15	0.35	110.6	2																				
15 TO 20	0.21	76.6	2											2									
20 TO 25	2.92	1163.4	432												47	14	7	2	1				
25 TO 30	3.04	1809.7	429												53	9			1	1			
30 TO 35	6.77	2907.1	6																				
ABOVE 35	6.74	2921.9	96											1	12	75	9	2					
TOTAL	20.49	8570.3	962												109	25	7	3	2	1			

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	UDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	15.2	44																				
1 TO 2	0.31	47.4	50																				
2 TO 5	1.32	290.5	19																				
5 TO 10	0.19	54.4	1																				
10 TO 15	0.17	50.7	1																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.61	162.2	50																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	15.2	44																				
1 TO 2	0.31	47.4	50																				
2 TO 5	1.33	181.2	63																				
5 TO 10	0.35	105.8	7																				
10 TO 15	0.35	110.6	2																				
15 TO 20	0.35	110.6	2																				
20 TO 25	0.35	110.6	2																				
25 TO 30	0.35	110.6	2																				
30 TO 35	0.35	110.6	2																				
ABOVE 35	20.49	8570.3	962																				
TOTAL	21.12	8792.9	1212																				



TABLE D244  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
ANDERSON AB, GUAM  
FOR THE  
MONTH OF JANUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.15	56.8	0																				
20 TO 25	0.19	74.2	1											1									
25 TO 30	0.22	94.8	0																				
30 TO 35	0.22	94.9	0																				
ABOVE 35	7.40	3294.4	1												1								
TOTAL	8.19	3617.1	2											1	1								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.14	21.3	18											1	3	6	5	1	1	1			
1 TO 2	0.36	59.6	32											1	2	14	12	2	1	1			
2 TO 5	0.63	114.2	35											1	4	10	13	4	3				
5 TO 10	0.14	43.4	0																				
10 TO 15	0.15	51.3	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.42	286.8	85											3	9	30	30	7	5	1			

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.14	21.3	18											1	3	6	5	1	1	1			
1 TO 2	0.36	59.6	32											1	2	14	12	2	1	1			
2 TO 5	0.63	114.2	35											1	4	10	13	4	3				
5 TO 10	0.14	43.4	0																				
10 TO 15	0.15	51.3	0																				
15 TO 20	0.15	56.8	0																				
20 TO 25	0.19	74.2	1											1									
25 TO 30	0.22	94.8	0																				
30 TO 35	0.22	96.9	0																				
ABOVE 35	7.40	3294.4	1												1								
TOTAL	9.61	3903.9	87											3	9	31	31	7	5	1			

TABLE D245  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
ANDERSON AB, GUAM  
FOR THE  
MONTH OF FEBRUARY

NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																				
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.	0.	0																					
1 TO 2	0.	0.	0																					
2 TO 5	0.	0.	0																					
5 TO 10	0.	0.	0																					
10 TO 15	0.	0.	0																					
15 TO 20	0.23	84.2	1													1								
20 TO 25	0.30	117.0	27										1	11	9	5	1							
25 TO 30	1.25	535.8	0																					
30 TO 35	3.47	204.6	0																					
ABOVE 35	23.50	10896.6	556											1	1	12	34	198	234	49	19	5	2	1
TOTAL	25.75	11838.1	584											1	1	12	35	209	244	54	20	5	2	1

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.36	8.4	18										1	1	1	3	2	4	2	1	2		
1 TO 2	0.36	9.9	12										1	3	1	6	2						
2 TO 5	0.23	50.5	21										1	2	5	11	1	1					
5 TO 10	0.20	62.3	8											1	4	2	1						
10 TO 15	0.19	62.1	4													4							
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.74	193.7	63						1		2	7	11	23	7	3	4	2	1	2			

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.36	8.4	18											1	1	1	3	2	4	2	1	2		
1 TO 2	0.36	9.9	12											1	3	1	6	2						
2 TO 5	0.23	50.5	21											1	2	5	11	1	1					
5 TO 10	0.20	62.3	8											1	4	2	1							
10 TO 15	0.19	62.1	4																					
15 TO 20	0.23	84.2	1																					
20 TO 25	0.30	117.0	27											1	11	9	5	1						
25 TO 30	1.25	535.8	0																					
30 TO 35	0.47	204.6	0																					
ABOVE 35	23.50	10896.6	556											1	1	12	34	198	234	49	19	5	2	1
TOTAL	26.49	12031.3	647											2	1	14	42	220	267	61	23	9	4	2



TABLE D84a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
NICKAM AFB, HAWAII  
AND  
ANDERSON AB, GUAM  
FOR THE  
MONTH OF JUNE

				NON-STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.	0.	0													
1 TO 2	0.	0.	0													
2 TO 5	0.	0.	0													
5 TO 10	0.	0.	0													
10 TO 15	0.	0.	0													
15 TO 20	0.12	43.4	0													
20 TO 25	0.15	59.0	0													
25 TO 30	0.15	64.0	16													
30 TO 35	4.77	2095.4	16								1		3	1	7	1
ABOVE 35	4.11	1789.9	33										3	9	20	1
TOTAL	9.30	4013.3	65								1		6	15	37	3

				STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.03	5.0	20													
1 TO 2	0.03	8.0	5													
2 TO 5	0.04	12.0	4													
5 TO 10	0.08	27.3	0													
10 TO 15	0.09	31.1	3													
15 TO 20	0.	0.	0													
20 TO 25	0.	0.	0													
25 TO 30	0.	0.	0													
30 TO 35	0.	0.	0													
ABOVE 35	0.	0.	0													
TOTAL	0.20	84.3	29													

				STORM PLUS NON-STORM												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.03	5.0	20													
1 TO 2	0.03	8.0	5													
2 TO 5	0.04	12.0	4													
5 TO 10	0.08	27.3	0													
10 TO 15	0.09	31.1	3													
15 TO 20	0.12	43.4	0													
20 TO 25	0.15	59.0	0													
25 TO 30	0.15	64.0	16													
30 TO 35	4.77	2095.4	16													
ABOVE 35	4.11	1789.9	33													
TOTAL	9.59	4097.6	94													

TABLE D84b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
NICKAM AFB, HAWAII  
AND  
ANDERSON AB, GUAM  
FOR THE  
MONTH OF JULY

				NON-STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.	0.	0													
1 TO 2	0.	0.	0													
2 TO 5	0.	0.	0													
5 TO 10	0.	0.	0													
10 TO 15	0.	0.	0													
15 TO 20	0.19	69.6	0													
20 TO 25	0.22	85.0	7													
25 TO 30	0.25	105.2	0													
30 TO 35	4.15	1857.0	0													
ABOVE 35	10.47	4992.7	1													
TOTAL	15.27	6709.6	8													

				STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.02	3.3	0													
1 TO 2	0.08	12.5	24													
2 TO 5	0.31	58.3	25													
5 TO 10	0.19	58.2	0													
10 TO 15	0.19	63.6	0													
15 TO 20	0.	0.	0													
20 TO 25	0.	0.	0													
25 TO 30	0.	0.	0													
30 TO 35	0.	0.	0													
ABOVE 35	0.	0.	0													
TOTAL	0.80	196.1	57													

				STORM PLUS NON-STORM												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.02	3.3	0													
1 TO 2	0.08	12.5	24													
2 TO 5	0.31	58.3	25													
5 TO 10	0.19	58.2	0													
10 TO 15	0.19	63.6	0													
15 TO 20	0.19	69.6	0													
20 TO 25	0.22	85.0	7													
25 TO 30	0.25	105.2	0													
30 TO 35	4.15	1857.0	0													
ABOVE 35	10.47	4992.7	1													
TOTAL	16.06	6909.7	65													



TABLE D241  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
ANDERSON AB, GUAM  
FOR THE  
MONTH OF AUGUST

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.07	26.4	9											4	3	2							
20 TO 25	0.13	45.8	6											5	1								
25 TO 30	0.15	55.0	1											1									
30 TO 35	0.13	53.3	3																				
ABOVE 35	7.88	3569.3	37										1	6	20	3							
TOTAL	8.37	3749.5	46										1	16	24	5							

STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.04	5.9	16					1			1	1	2	3	1	3	1		1				
1 TO 2	0.19	26.9	21							1	1	3	4	5	4	2			1	1	1		
2 TO 5	0.68	113.9	34						2			6	11	10	3	1							
5 TO 10	0.27	23.2	7											3	3								
10 TO 15	0.37	23.8	2									1		1									
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.5	187.7	80					1	2	1	2	11	29	22	6	7	2		2	1	1		

STORM PLUS NON-STORM

ALTITUDE, (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.4	5.9	16					1					2	3	1	3	1						
1 TO 2	0.19	26.9	21										3	4	4	2							
2 TO 5	0.68	113.9	34								1	6	11	10	3	1							
5 TO 10	0.27	23.2	7										3	3									
10 TO 15	0.37	23.8	2									1	1			1							
15 TO 20	0.07	26.4	9										4	3	2								
20 TO 25	0.13	45.8	6										5	1									
25 TO 30	0.15	55.0	1																				
30 TO 35	0.13	53.3	0																				
ABOVE 35	7.88	3569.0	30										6	20	3								
TOTAL	9.43	3937.2	126					1	2	1	2	12	16	46	13	7	2			2	1	1	

TABLE D242  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
ANDERSON AB, GUAM  
FOR THE  
MONTH OF NOVEMBER

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.21	74.6	2											2									
20 TO 25	2.92	1163.4	432											47	14	7	2	1	1				
25 TO 30	1.44	1531.7	427											53	9			1	1				
30 TO 35	6.77	2907.1	0																				
ABOVE 35	6.74	2921.5	99																				
TOTAL	20.49	8570.3	962																				
				2		3	12	22		89	205	422	109	25		7	3	2	1				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.06	8.8	16																				
1 TO 2	0.36	11.2	13																				
2 TO 5	0.12	29.3	19																				
5 TO 10	0.19	54.4	1																				
10 TO 15	0.17	54.7	1																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	0.61	162.2	50																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.06	8.8	16																				
1 TO 2	0.36	11.2	13																				
2 TO 5	0.12	29.0	19																				
5 TO 10	0.19	54.4	1																				
10 TO 15	0.17	54.7	1																				
15 TO 20	0.21	74.6	2																				
20 TO 25	2.92	1163.4	432																				
25 TO 30	3.64	1503.7	429																				
30 TO 35	6.77	2907.1	0																				
ABOVE 35	6.74	2921.5	99																				
TOTAL	21.13	8752.5	1312																				



TABLE D24a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
WICKAM AFB, HAWAII  
AND  
ANDERSON AB, GUAM  
FOR THE  
MONTH OF DECEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.05	10.2	0																				
20 TO 25	0.08	32.4	0																				
25 TO 30	0.08	34.2	0																				
30 TO 35	3.61	1573.0	1										1										
ABOVE 35	2.35	871.9	0																				
TOTAL	5.08	2529.6	1										1										

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.01	2.3	7							1		1		3	2								
1 TO 2	0.01	1.5	2											2									
2 TO 5	0.02	5.5	4										3	1									
5 TO 10	0.04	12.6	0																				
10 TO 15	0.06	19.9	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.14	41.9	13							1		1	3	4	2								

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	UDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.01	2.3	7							1		1			2								
1 TO 2	0.01	1.5	2												3								
2 TO 5	0.02	5.5	4											1									
5 TO 10	0.04	12.6	0																				
10 TO 15	0.06	19.9	0																				
15 TO 20	0.05	10.2	0																				
20 TO 25	0.08	32.4	0																				
25 TO 30	0.08	34.2	0																				
30 TO 35	3.61	1573.0	1										1										
ABOVE 35	2.35	871.9	0																				
TOTAL	6.32	2571.5	14							1		1	4	6	2								



TABLE D25a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
YOKOTA AB, JAPAN

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0	0	0																				
1 TO 2	0	0	0																				
2 TO 5	0	0	0																				
5 TO 10	0	0	0																				
10 TO 15	0	0	0																				
15 TO 20	0.19	72.4	0																				
20 TO 25	0.22	88.0	0																				
25 TO 30	7.28	3187.6	11																				
30 TO 35	3.46	1487.1	0																				
ABOVE 35	7.96	3432.4	102																				
TOTAL	19.12	8268.4	113											4	23	67	7	1					

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	26.3	51							1	10				12	8	5	6					
1 TO 2	0.24	39.5	37										1	10	7	12	2						
2 TO 5	0.53	129.3	25												2	3							
5 TO 10	0.30	93.9	5																				
10 TO 15	0.31	105.2	0																				
15 TO 20	0.09	33.3	11											4	6	1							
20 TO 25	0.12	45.4	0																				
25 TO 30	0.13	55.5	0																				
30 TO 35	0.21	89.4	0																				
ABOVE 35	1.06	456.4	0																				
TOTAL	3.16	1064.2	129							1	11	40	40	24	7	6							

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	26.3	51							1	10	9	12	3	2	5	6						
1 TO 2	0.24	39.5	37										1	10	7	10	2						
2 TO 5	0.93	129.3	25											1	7	12	5						
5 TO 10	0.30	93.9	5												2	3							
10 TO 15	0.31	105.2	0																				
15 TO 20	0.29	105.7	11												4	6	1						
20 TO 25	0.34	134.2	0																				
25 TO 30	7.42	3243.1	11																				
30 TO 35	3.67	1576.4	0										1	7	3								
ABOVE 35	9.32	3878.9	102											4	23	67	7	1					
TOTAL	22.28	9332.6	242							1		16	77	110	31	8	6						

TABLE D25b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
YOKOTA AB, JAPAN  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0	0	0																				
1 TO 2	0	0	0																				
2 TO 5	0	0	0																				
5 TO 10	0	0	0																				
10 TO 15	0	0	0																				
15 TO 20	0.09	33.9	0																				
20 TO 25	0.11	42.4	0																				
25 TO 30	7.13	3124.9	11																				
30 TO 35	0	0	0																				
ABOVE 35	0	0	0																				
TOTAL	7.33	3201.3	11										1	7	3								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.06	9.0	20																				
1 TO 2	0.11	19.3	21										5	3	7	4	1						
2 TO 5	0.21	56.7	2										0	6	5	1							
5 TO 10	0.08	23.1	0											1	1								
10 TO 15	0.13	43.9	0																				
15 TO 20	0	0	0																				
20 TO 25	0	0	0																				
25 TO 30	0	0	0																				
30 TO 35	0	0	0																				
ABOVE 35	0	0	0																				
TOTAL	0.59	149.9	43										5	12	14	10	2						

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.06	9.0	20																				
1 TO 2	0.11	19.3	21										5	3	7	4	1						
2 TO 5	0.21	56.7	2										0	6	5	1							
5 TO 10	0.08	23.1	0											1	1								
10 TO 15	0.13	43.9	0																				
15 TO 20	0.09	33.9	0																				
20 TO 25	0.11	42.4	0																				
25 TO 30	7.13	3124.9	11										1	7	3								
30 TO 35	0	0	0																				
ABOVE 35	0	0	0																				
TOTAL	7.92	3351.2	54										6	19	17	10	2						



TABLE D894  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
YOKOTA AB, JAPAN  
FOR THE  
AUTUMN SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.10	30.9	0																				
20 TO 25	0.12	40.4	0																				
25 TO 30	0.18	62.7	0																				
30 TO 35	0.46	1407.1	0																				
ABOVE 35	7.96	3432.4	102																				
TOTAL	11.79	9067.1	102											4	23	67	7	1					

STORM CONDITIONS

			WIND DISTRIBUTION (FT./SEC.)																				
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	17.3	31							1		5		5	4	4		6					
1 TO 2	0.13	20.2	16											1	5	1							
2 TO 5	0.32	74.6	23									1	7	11	4								
5 TO 10	0.22	70.9	5										2	3									
10 TO 15	0.18	61.3	0																				
15 TO 20	0.19	39.3	11											4	6	1							
20 TO 25	0.12	49.4	0																				
25 TO 30	0.13	59.9	0																				
30 TO 35	0.21	89.4	0																				
ABOVE 35	1.06	446.4	0																				
TOTAL	2.57	914.3	86							1		6	28	26	14	5	6						

STORM PLUS NON-STORM

			WIND DISTRIBUTION (FT./SEC.)																				
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	17.3	31							1				9	5	6	4						
1 TO 2	0.13	20.2	16										9	1	9	1							
2 TO 5	0.32	74.6	23								1	7	11	4									
5 TO 10	0.22	70.9	5										2	3									
10 TO 15	0.18	61.3	0																				
15 TO 20	0.19	71.8	11											4	6	1							
20 TO 25	0.23	91.8	0																				
25 TO 30	0.20	110.2	0																				
30 TO 35	0.67	1576.4	0																				
ABOVE 35	9.32	3878.9	102																				
TOTAL	14.36	5981.4	188							1		10	51	93	21	6	6						

TABLE D294  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
HICKAM AFB, HAWAII  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF FEBRUARY

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.09	33.9	0																				
20 TO 25	0.11	42.4	0																				
25 TO 30	7.13	3124.9	11																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	7.33	3201.3	11																				

STORM CONDITIONS

			WIND DISTRIBUTION (FT./SEC.)																				
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.06	9.0	20										5	5	7	4	1						
1 TO 2	0.11	19.3	21										9	6	9	1							
2 TO 5	0.21	54.7	2											1	1								
5 TO 10	0.30	23.1	0																				
10 TO 15	0.13	43.9	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.59	149.9	43									5	12	14	10	2							

STORM PLUS NON-STORM

			WIND DISTRIBUTION (FT./SEC.)																				
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.06	9.0	20										5	7	4								
1 TO 2	0.11	19.3	21										9	6	9	1							
2 TO 5	0.21	54.7	2											1	1								
5 TO 10	0.30	23.1	0																				
10 TO 15	0.13	43.9	0																				
15 TO 20	0.39	33.9	0																				
20 TO 25	0.11	42.4	0																				
25 TO 30	7.13	3124.9	11																				
30 TO 35	0.	0.	0									1	7	3									
ABOVE 35	0.	0.	0																				
TOTAL	7.92	3251.2	54									6	14	17	10	2							



TABLE D896  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
NICKAN AFB, HAWAII  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF NOVEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.10	30.5	0																				
20 TO 25	0.12	46.4	0																				
25 TO 30	0.15	62.7	0																				
30 TO 35	3.40	1487.1	0																				
ABOVE 35	7.06	3432.4	102																				
TOTAL	11.70	5067.1	102											4	23	67	7	1					

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	17.3	31								1			5	6	5	4	4	6				
1 TO 2	5.15	20.2	16											9	1	5	1						
2 TO 5	0.32	74.6	23									1	7	11	4								
5 TO 10	0.22	70.9	5										2	3									
10 TO 15	0.10	61.3	0																				
15 TO 20	0.09	35.3	11										4	6	1								
20 TO 25	0.12	45.4	0																				
25 TO 30	0.15	55.5	0																				
30 TO 35	0.21	89.4	0																				
ABOVE 35	1.06	446.4	0																				
TOTAL	2.57	914.3	66							1		6	28	26	14	5	6						

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	17.3	31								1			5	6	5	4	4	6				
1 TO 2	0.15	20.2	16											9	1	5	1						
2 TO 5	0.32	74.6	23									1	7	11	4								
5 TO 10	0.22	70.9	5										2	3									
10 TO 15	0.10	61.3	0																				
15 TO 20	0.19	71.0	11										4	6	1								
20 TO 25	0.23	91.0	0																				
25 TO 30	0.20	110.2	0																				
30 TO 35	3.67	1576.4	0																				
ABOVE 35	9.02	3676.9	102										4	23	67	7	1						
TOTAL	14.36	5061.4	168								1	10	51	93	21	6	6						



TABLE 226a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
NAKE AIRPORT, NAKE ISLAND  
AND  
CLARK AB, PHILIPPINES

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	2.50	933.3	20																				
20 TO 25	3.65	1417.7	12																				
25 TO 30	11.30	4016.3	10																				
30 TO 35	33.36	2315.6	58																				
ABOVE 35	79.46	3593.7	157																				
TOTAL	149.5	6511.6	749																				

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.74	122.4	136									4	21	26	31	24	19	0					
1 TO 2	0.72	139.4	141						1	1	7	8	36	46	24	12	2	2			1		
2 TO 5	1.97	431.3	24							2	9	13	66	107	32	5	6						
5 TO 10	2.37	695.8	98				1			1	1	5	27	39	14	7	1	2					
10 TO 15	2.47	825.9	25									4	6	9	3	1	1	1					
15 TO 20	2.25	90.8	5											2	1								
20 TO 25	2.35	137.3	6																				
25 TO 30	2.42	179.1	6																				
30 TO 35	2.42	1397.6	86										1	4	1								
ABOVE 35	3.32	1441.3	145						1	3	3	1	11	38	57	10	7	4	5	1	3		
TOTAL	19.33	5123.6	880				2	1	5	7	24	73	220	330	121	52	24	9	1	4			

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.74	122.4	136									6	21	26	31	24	19	8					
1 TO 2	0.72	139.4	141						1	1	7	0	36	40	24	12	2	2					
2 TO 5	1.97	431.3	240						2	9	13	66	107	32	5	6					1		
5 TO 10	2.37	695.8	98				1			1	1	5	27	39	14	7	1	2					
10 TO 15	2.47	825.9	25									4	6	9	3	1	1	1					
15 TO 20	2.83	1021.1	73									4	6	8	1	2							
20 TO 25	4.42	1594.7	12									1	4	2									
25 TO 30	10.42	4197.4	24						1														
30 TO 35	55.78	24208.2	624																				
ABOVE 35	82.70	37485.0	382						1	1	3	3	1	10	91	141	1	11	6	3	2	3	
TOTAL	164.79	75231.2	1629				2	2	5	0	26	101	432	733	179	74	26	0	2	6			

TABLE 226b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
NAKE AIRPORT, NAKE ISLAND  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.70	20.4	2											1	1								
20 TO 25	1.31	506.8	1												1								
25 TO 30	1.23	510.9	0																				
30 TO 35	15.11	6020.2	5																				
ABOVE 35	23.44	1097.4	12																				
TOTAL	41.88	18486.6	23																				

STORM CONDITIONS																							
ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT.)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.23	37.4	49																				
1 TO 2	0.24	41.9	70																				
2 TO 5	0.56	112.8	105																				
5 TO 10	0.71	21.4	24																				
10 TO 15	0.61	203.5	3																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.72	333.5	0																				
ABOVE 35	1.30	506.1	21																				
TOTAL	4.19	1537.0	272																				

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.23	37.4	49																				
1 TO 2	0.24	41.9	70							1	3	7	13	11	7	6	1				1		
2 TO 5	0.56	112.8	105							1	5	8	24	44	15	4							
5 TO 10	0.71	213.4	24									2	8	9	3	1	1						
10 TO 15	0.61	223.5	3											3									
15 TO 20	0.70	203.4	2											1									
20 TO 25	1.31	506.0	1											1									
25 TO 30	1.23	510.9	0																				
30 TO 35	15.84	4953.0	5											1	4								
ABOVE 35	24.00	11160.5	33											12	20	1							
TOTAL	46.27	20025.4	292						1	1	12	22	64	119	31	20	3	2			1		



TABLE D366  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
WAKE AIRPORT, WAKE ISLAND  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.0	0																				
5 TO 10	0.00	0.0	0																				
10 TO 15	0.00	0.0	0																				
15 TO 20	0.35	129.0	0																				
20 TO 25	0.50	191.6	0																				
25 TO 30	0.32	132.1	0																				
30 TO 35	5.91	2593.0	0																				
ABOVE 35	8.34	3044.7	15																				
TOTAL	15.62	6847.2	15																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.17	11.4	13																				
2 TO 5	0.28	95.7	27																				
5 TO 10	0.32	84.0	10																				
10 TO 15	0.24	79.6	12																				
15 TO 20	0.00	0.0	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.00	0.0	0																				
30 TO 35	0.00	0.0	0																				
ABOVE 35	0.42	182.4	51																				
TOTAL	1.38	421.7	110																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0									1			2	1							
1 TO 2	0.17	11.4	13									1	6										
2 TO 5	0.28	95.7	27								1	15	3				2						
5 TO 10	0.32	84.0	10									2	7	1									
10 TO 15	0.24	79.6	12								3	3	1	2		1	1	1					
15 TO 20	0.00	0.0	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.00	0.0	0																				
30 TO 35	5.91	2593.0	0																				
ABOVE 35	8.96	4271.1	66																				
TOTAL	7.00	7248.9	133								2	1	6	36	61	17	4	3	1				

TABLE D364  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
WAKE AIRPORT, WAKE ISLAND  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.0	0																				
5 TO 10	0.00	0.0	0																				
10 TO 15	0.00	0.0	0																				
15 TO 20	0.39	141.5	15																				
20 TO 25	0.37	224.9	8																				
25 TO 30	0.43	183.0	3																				
30 TO 35	1.34	592.4	0																				
ABOVE 35	21.77	9816.6	47																				
TOTAL	24.90	10962.5	70																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	16.8	21																				
1 TO 2	0.16	27.2	25																				
2 TO 5	0.60	116.3	47																				
5 TO 10	0.42	125.4	14																				
10 TO 15	0.41	135.0	3																				
15 TO 20	0.33	111.8	0																				
20 TO 25	0.35	109.4	0																				
25 TO 30	0.25	71.1	0																				
30 TO 35	0.22	92.0	0																				
ABOVE 35	1.14	492.0	6																				
TOTAL	3.10	1092.9	116																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	16.8	21																				
1 TO 2	0.16	27.2	25																				
2 TO 5	0.60	116.3	47							1													
5 TO 10	0.42	125.4	14								3	2	17	16	7	1		1					
10 TO 15	0.41	135.0	3												4	7	2	1					
15 TO 20	0.42	133.4	15										1	2									
20 TO 25	0.62	266.4	8								4	4	5	2	2								
25 TO 30	0.40	204.1	0						1		1	2	5	1	1						1		
30 TO 35	1.36	609.2	0																				
ABOVE 35	22.91	13306.6	53									1	10	41		1							
TOTAL	27.60	12311.5	186					1		2	5	14	47	86	21	1		1			1		



TABLE 2000  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
WAKE AIRPORT, WAKE ISLAND  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
AUTUMN SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.36	303.3	3											1	2								
20 TO 25	1.27	303.3	3											2	1								
25 TO 30	0.02	3192.7	10											5	13								
30 TO 35	0.02	3192.7	10											2	16	135	320	45	15				
ABOVE 35	25.71	11301.9	60											4	53	39	0	3					
TOTAL	67.04	20016.5	640											2	20	176	371	53	10				

				STORM CONDITIONS																			
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.35	30.3	61																				
1 TO 2	0.25	30.3	33																				
2 TO 5	0.30	167.3	61																				
5 TO 10	0.02	201.0	54																				
10 TO 15	1.21	407.8	7																				
15 TO 20	0.22	79.0	3																				
20 TO 25	0.30	117.9	0																				
25 TO 30	0.37	150.0	0																				
30 TO 35	1.49	631.3	24																				
ABOVE 35	0.40	170.9	47																				
TOTAL	6.39	2111.0	374																				

				STORM PLUS NON-STORM																			
ALTITUDE* (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.35	30.3	61																				
1 TO 2	0.25	30.3	33																				
2 TO 5	0.30	167.3	61																				
5 TO 10	0.02	201.0	52				1			1	1	3	14	32	7		3		2				
10 TO 15	1.21	407.0	7							1	1	3	13	16	0		5						
15 TO 20	1.27	402.3	6											1	4	1							
20 TO 25	1.07	611.9	3											2	1								
25 TO 30	0.30	3506.7	24											0	17	1							
30 TO 35	35.00	14035.0	610						1		2	27	163	353	57	16							
ABOVE 35	26.11	11532.0	150				1	1	3	1	1	13	47	47	15	0	6		3	1	3		
TOTAL	73.13	20027.5	1316				2	1	3	3	0	27	206	497	109	42	17	5	1	3			

TABLE 2001  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
WAKE AIRPORT, WAKE ISLAND  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
MONTH OF JANUARY

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.44	194.1	2											1	1								
20 TO 25	0.02	315.4	1												1								
25 TO 30	0.73	299.4	0																				
30 TO 35	11.52	4000.0	5																				
ABOVE 35	11.94	3999.9	0											1	4								
TOTAL	25.45	11149.0	8											2	6								

				STORM CONDITIONS																			
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	24.6	41																				
1 TO 2	0.11	20.4	42																				
2 TO 5	0.24	37.0	61																				
5 TO 10	0.34	105.0	0																				
10 TO 15	0.34	109.0	0																				
15 TO 20	0.4	0.	0																				
20 TO 25	0.4	0.	0																				
25 TO 30	0.4	0.	0																				
30 TO 35	0.4	0.	0																				
ABOVE 35	0.4	0.	0																				
TOTAL	1.19	316.7	192																				

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WSE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.15	24.6	41									3	6	11	9	6	4						
1 TO 2	0.11	22.4	42							1		3	3	10	14	3	3						
2 TO 5	0.24	37.0	61								1	4	5	17	21	9	4						
5 TO 10	0.34	103.0	8											2	4	1	1						
10 TO 15	0.34	109.0	0																				
15 TO 20	0.44	194.1	2											1	1								
20 TO 25	0.02	315.4	1												1								
25 TO 30	0.73	299.4	0																				
30 TO 35	11.52	4000.0	5											1	4								
ABOVE 35	11.94	3999.9	0																				
TOTAL	26.04	11066.5	160							1	1	10	14	45	94	19	12	2	1		1		



TABLE D86  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
WAKE AIRPORT, WAKE ISLAND  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
MONTH OF MARCH  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.35	10.6	0																				
20 TO 25	0.35	20.0	0																				
25 TO 30	1.18	39.6	0																				
30 TO 35	0.28	16.2	0																				
ABOVE 35	3.24	1470.4	0																				
TOTAL	3.91	1506.9	0																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	2.5	0																				
1 TO 2	0.01	1.0	0																				
2 TO 5	0.02	6.3	2																				
5 TO 10	0.03	10.6	0																				
10 TO 15	0.05	17.2	0																				
15 TO 20	0.	3.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.13	30.4	2																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	2.9	0																				
1 TO 2	0.01	1.6	0																				
2 TO 5	0.02	6.9	2																				
5 TO 10	0.03	10.6	0											2									
10 TO 15	0.05	17.2	0																				
15 TO 20	0.05	18.6	0																				
20 TO 25	0.09	25.3	0																				
25 TO 30	0.04	35.6	0																				
30 TO 35	0.08	36.2	0																				
ABOVE 35	3.24	167.4	2																				
TOTAL	3.64	1619.3	2											2									

TABLE D86b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
WAKE AIRPORT, WAKE ISLAND  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
MONTH OF APRIL  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.30	106.3	0																				
20 TO 25	0.44	171.6	0																				
25 TO 30	0.23	90.9	0																				
30 TO 35	1.03	2517.4	0																				
ABOVE 35	5.29	2374.3	15											2	7	9	1						
TOTAL	12.11	9266.3	15											2	7	9	1						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.03	6.0	5																				
1 TO 2	0.36	9.9	13								1	1	1	5	4	1							
2 TO 5	0.25	49.3	25								1		7	13	3		2						
5 TO 10	0.29	73.3	10										2	7	1								
10 TO 15	0.19	62.4	12									3	3	1	2	1	1	1					
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.42	102.4	51								2	2	15	20	2	2							
TOTAL	1.24	303.3	116								2	1	6	29	34	16	4	3	1				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0									1	1	1	5	6							
1 TO 2	0.30	0.0	13								1	1	1	7	15	3		2					
2 TO 5	0.25	40.3	25											2	7	1							
5 TO 10	0.20	73.3	10																				
10 TO 15	0.10	67.6	12																				
15 TO 20	0.30	166.3	0									3	3	1	2	1	1	1					
20 TO 25	0.45	171.0	0																				
25 TO 30	0.20	90.0	0																				
30 TO 35	0.00	2517.6	0																				
ABOVE 35	0.71	2596.7	66																				
TOTAL	13.35	5649.6	131								2	1	0	34	50	17	4	3	1				



**WAKE AIRPORT, WAKE ISLAND**  
**CLARK AB, PHILIPPINES**  
**FOR THE**  
**MONTH OF JUNE**

**NON-STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.20	72.7	15																				
20 TO 25	0.22	89.4	6																				
25 TO 30	0.20	85.8	0																				
30 TO 35	0.09	300.7	0																				
ABOVE 35	10.15	4604.9	13																				
TOTAL	11.46	5251.5	34																				

**STORM CONDITIONS**

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	8.2	3																				
1 TO 2	0.07	12.3	0																				
2 TO 5	0.10	35.7	16																				
5 TO 10	0.22	85.6	0																				
10 TO 15	0.21	69.2	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.73	191.0	27																				

**STORM PLUS NON-STORM**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	8.2	3																				
1 TO 2	0.07	12.3	0																				
2 TO 5	0.10	35.7	16																				
5 TO 10	0.22	85.8	0																				
10 TO 15	0.21	69.2	0																				
15 TO 20	0.20	72.7	15																				
20 TO 25	0.22	89.4	6																				
25 TO 30	0.20	85.8	0																				
30 TO 35	0.09	300.7	0																				
ABOVE 35	10.15	4604.9	13																				
TOTAL	12.39	5442.5	61																				

**TABLE D26J**  
**DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY**  
**FOR THE ROUTE BETWEEN**  
**WAKE AIRPORT, WAKE ISLAND**  
**AND**  
**CLARK AB, PHILIPPINES**  
**FOR THE**  
**MONTH OF JULY**

**NON-STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.09	30.3	0																				
20 TO 25	0.23	92.5	2											1		1							
25 TO 30	0.08	35.7	0																				
30 TO 35	0.10	44.7	0																				
ABOVE 35	5.00	2607.3	22																				
TOTAL	6.31	2894.2	24											6	16								
														7	16	1							

**STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	3.6	7										2	1	1	1	1						
1 TO 2	0.03	6.1	0											3	3								
2 TO 5	0.13	26.1	0																				
5 TO 10	0.07	19.6	9										2	6	1								
10 TO 15	0.07	21.0	3										1	2									
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.32	77.3	27									2	7	12	5	1							

**STORM PLUS NON-STORM**

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	3.6	7																				
1 TO 2	0.03	6.1	0																				
2 TO 5	0.13	26.1	0																				
5 TO 10	0.07	19.6	9																				
10 TO 15	0.07	21.9	3																				
15 TO 20	0.09	34.0	0																				
20 TO 25	0.23	92.5	2																				
25 TO 30	0.08	35.7	0																				
30 TO 35	0.10	44.7	0																				
ABOVE 35	5.00	2607.3	22																				
TOTAL	6.62	2971.5	31																				



TABLE D24A  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
WAKE AIRPORT, WAKE ISLAND  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
MONTH OF AUGUST  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1			0																				
1 TO 2		0.	0																				
2 TO 5		0.	0																				
5 TO 10		0.	0																				
10 TO 15		0.	0																				
15 TO 20	0.10	34.0	0																				
20 TO 25	0.12	49.0	0																				
25 TO 30	0.15	61.4	0																				
30 TO 35	0.35	149.1	0																				
ABOVE 35	5.02	2524.4	12										1		11								
TOTAL	6.52	2814.0	12										1		11								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.00	0.0	11																					
1 TO 2	0.05	8.0	9																					
2 TO 5	0.29	94.5	31																					
5 TO 10	0.12	35.2	5																					
10 TO 15	0.13	44.0	7																					
15 TO 20	0.23	11.0	3																					
20 TO 25	0.05	19.4	3																					
25 TO 30	0.05	21.1	3																					
30 TO 35	0.22	92.0	0																					
ABOVE 35	1.14	490.0	6										2		4									
TOTAL	2.13	782.6	62										3		4		19		23		17		2	

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.03	5.0	11																				
1 TO 2	0.03	8.0	9																				
2 TO 5	0.29	94.5	31																				
5 TO 10	0.12	35.2	5																				
10 TO 15	0.13	44.0	7																				
15 TO 20	0.13	46.7	3																				
20 TO 25	0.17	64.5	3																				
25 TO 30	0.20	82.5	0																				
30 TO 35	0.57	241.9	0																				
ABOVE 35	6.66	3114.4	18																				
TOTAL	8.66	3597.5	74																				

TABLE D24B  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
WAKE AIRPORT, WAKE ISLAND  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
MONTH OF SEPTEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.0	0																				
5 TO 10	0.00	0.0	0																				
10 TO 15	0.00	0.0	0																				
15 TO 20	0.00	0.0	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.00	0.0	0																				
30 TO 35	3.40	1440.7	24										2	3	16		2	1					
ABOVE 35	3.57	1561.0	42										1	10	18		4	1					
TOTAL	7.48	3205.5	66										3	21	34		6	2					

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.03	5.7	5									1	2		1								
1 TO 2	0.31	3.0	1												1								
2 TO 5	6.06	12.0	11									2	3	6									
5 TO 10	0.07	29.1	2																				
10 TO 15	6.09	30.0	0																				
15 TO 20	0.12	41.3	3																				
20 TO 25	0.10	61.0	0												2	1							
25 TO 30	0.21	86.6	3																				
30 TO 35	0.20	82.5	42																				
ABOVE 35	1.07	33.5	1																				
TOTAL	1.31	377.6	73									11	21	26	9	1							

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.03	9.7	5										1	2	1	1							
1 TO 2	0.01	3.0	1												1								
2 TO 5	0.06	12.0	11									2	3	6									
5 TO 10	0.07	29.1	2										1						1				
10 TO 15	0.09	30.0	0																				
15 TO 20	0.12	41.3	3													2	1						
20 TO 25	0.10	61.0	0																				
25 TO 30	0.21	86.6	3																				
30 TO 35	0.10	1726.3	66						1				1	3	1								
ABOVE 35	3.64	1592.2	43									10	16	29	8	2							
												1	19	10	4	1							
TOTAL	8.49	3562.9	136						1			14	42	60	19	3			1				



### NON-STORM CONDITIONS

DISTRIBUTION (FT./SEC.)

.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
		1	2								
		1	1								
		3	3								
		6	25	1							
3	15	17	4	2							
3	26	40	5	4							

### STORM CONDITIONS

WIND DISTRIBUTION (FT./SEC.)																
21	-17.5	-15	-12.5	-10	-7.5	-5	-2.5	+2.5	+7.5	+12.5	+15	+17.5	+20	+25	+30	+35
					1	2	5	2	6	4						
						1	1	1	1	1						
						3	1									
					2	5	10	7	1		1					
					1	1	3	1								
							1									
							20	6								
1	1	3	1	1	3	15	12	7	5	6	3	1	3			
1	1	3	1	1	16	42	53	24	12	11	4	1	3			

STORM PLUS NON-STORM

UOE DISTRIBUTION (PT./SEC.)																		
PC	-17.5	-15	-12.5	-10	-7.5	-5	-2.5	+2.5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
						1	2	5	2	2	2	6						
							1	1	1	1		1						
							3	1										
						2	5	10	7	1			1					
						1	1	3	1									
							1	2										
							1	1										
							3	6										
					3		21	45	7	2								
1	1	1	3	1	1	12	20	29	11	7	6	3	1	1				
1	1	3	1	1	1	19	60	101	29	16	11	6	1	1	3			

### NON-STORY CONDITIONS

MODE DISTRIBUTION (FT./SEC.)

KC	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
						1										
						2										
						15										
	8	1~	126			279	42	12								
	2	14	129			289	42	12								

### STORM CONDITIONS

WIND DISTRIBUTION (FT./SEC.)																			
0	-17.5	-15	-12.5	-10	-7.5	-5	-2.5	0	+2.5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
				2	3	4	9	7	4				3						
				1	3	6	7	8	3										
			1	1	1	0	25	7				3							
1			1	1	1	7	6	1	4										
						1													
1				2	5	10	20	47	25	11	6								

**STORM PLUS NON-STORM**

U.S. DISTRIBUTION (17./SEC.)																
0	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
					2	9	6	9	7	4						
					1	3	6	7	8	3						
				1	1	1	0	25	7		3					
1				1	1	1	7	6	1	4						
							1									
							2	10								
				2	14	126	279	40	12							
1			2	7	24	157	336	65	23	6						



TABLE D244  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
WAKE AIRPORT, WAKE ISLAND  
AND  
CLARK AB, PHILIPPINES  
FOR THE  
MONTH OF DECEMBER  
NON-STORM CONDITIONS

ALTITUDE* (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.35	126.4	0																				
20 TO 25	0.40	109.3	0																				
25 TO 30	0.50	211.1	0																				
30 TO 35	3.59	1639.3	0																				
ABOVE 35	11.50	5179.5	12																				
TOTAL	16.43	7336.6	12											5	7								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.08	12.9	0								1	2	2	1	2								
1 TO 2	0.13	21.6	20								1	2	0	0	2	6				1			
2 TO 5	0.26	94.1	44								1	3	11	23	6								
5 TO 10	0.37	106.6	16								2	6	5	2				1					
10 TO 15	0.28	93.6	3											3									
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.72	335.9	0																				
ABOVE 35	1.36	900.1	21											7	13	1							
TOTAL	3.20	1220.3	120								2	8	34	54	12	0	1	1					

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.08	12.9	0								1	2	2	1	2								
1 TO 2	0.13	21.6	20								1	2	0	0	2	6							
2 TO 5	0.26	94.1	44								1	3	11	23	6								
5 TO 10	0.37	106.6	16								2	6	5	2					1				
10 TO 15	0.28	93.6	3											3									
15 TO 20	0.35	126.4	0																				
20 TO 25	0.40	109.3	0																				
25 TO 30	0.50	211.1	0																				
30 TO 35	4.32	1972.0	0																				
ABOVE 35	12.06	5760.6	33											12	20	1							
TOTAL	19.63	6956.9	132								2	8	39	61	12	0	1	1					



TABLE D27a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
WAKE AIRPORT, WAKE ISLAND  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.32	110.0	0																				
20 TO 25	0.33	130.9	0																				
25 TO 30	0.44	105.0	0																				
30 TO 35	0.44	3721.1	1																				
ABOVE 35	10.26	4525.3	4																				
TOTAL	10.79	8670.1	7																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.36	9.1	4																				
1 TO 2	0.67	12.0	3																				
2 TO 5	0.26	60.1	11																				
5 TO 10	0.38	89.3	2																				
10 TO 15	0.27	91.4	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.94	259.9	20																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.36	9.1	4								1				1								
1 TO 2	0.67	12.0	3									2		1									
2 TO 5	0.26	60.1	11								1	3		2	5								
5 TO 10	0.20	89.3	2											2									
10 TO 15	0.27	91.4	0																				
15 TO 20	0.32	110.0	0																				
20 TO 25	0.33	130.9	0																				
25 TO 30	0.44	105.0	0																				
30 TO 35	0.44	3721.1	1											1									
ABOVE 35	10.26	4525.3	4												3								
TOTAL	2.73	8935.0	27								2	9		9	6				1				

TABLE D27b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
WAKE AIRPORT, WAKE ISLAND  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.06	21.0	0																				
20 TO 25	0.30	32.5	0																				
25 TO 30	0.10	42.0	0																				
30 TO 35	2.63	1179.0	0																				
ABOVE 35	0.73	382.5	0																				
TOTAL	3.61	1593.0	0																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.32	2.6	0																				
1 TO 2	0.31	1.8	1																				
2 TO 5	0.35	19.0	0																				
5 TO 10	0.23	16.4	0																				
10 TO 15	0.06	19.4	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.19	59.2	0																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	C.02	2.6	0																				
1 TO 2	0.31	1.8	1																				
2 TO 5	0.35	19.0	0																				
5 TO 10	0.23	16.4	0																				
10 TO 15	C.06	19.4	0																				
15 TO 20	0.06	21.0	0																				
20 TO 25	0.06	32.5	0																				
25 TO 30	0.10	42.0	0																				
30 TO 35	2.63	1179.0	0																				
ABOVE 35	C.73	382.5	0																				
TOTAL	3.60	1608.1	0																				



TABLE D273  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
NAKE AIRPORT, NAKE ISLAND  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS

ALTITUDE (100 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.0	0.0	0																					
1 TO 2	0.0	0.0	0																					
2 TO 5	0.0	0.0	0																					
5 TO 10	0.0	0.0	0																					
10 TO 15	0.0	0.0	0																					
15 TO 20	0.26	95.0	0																					
20 TO 25	0.25	90.4	0																					
25 TO 30	0.34	143.0	0																					
30 TO 35	0.81	2546.1	1																					
ABOVE 35	0.53	4262.9	6																					
TOTAL	16.18	7606.2	7																					

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0									1		1									
1 TO 2	0.0	10.3	2										1	1									
2 TO 5	0.21	45.1	3												3								
5 TO 10	0.23	66.0	2																				
10 TO 15	0.21	72.0	0											2									
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	0.75	202.7	11									1	1	4	4			1					

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.04	0.5	4								1			1					1				
1 TO 2	0.36	13.3	2										1		1								
2 TO 5	0.21	45.1	3																				
5 TO 10	0.23	66.0	2																				
10 TO 15	0.21	72.0	3																				
15 TO 20	0.26	95.0	0																				
20 TO 25	0.25	90.4	0																				
25 TO 30	0.34	143.0	0																				
30 TO 35	0.81	2546.1	1																				
ABOVE 35	0.53	4262.9	6																				
TOTAL	16.93	7206.9	20									1	3	3					1				
												1	5	7	4								

TABLE D274  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
NAKE AIRPORT, NAKE ISLAND  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
MONTH OF FEBRUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.6	21.0	0																				
20 TO 25	0.38	32.5	0																				
25 TO 30	0.10	42.0	0																				
30 TO 35	2.03	1179.0	0																				
ABOVE 35	2.73	322.5	0																				
TOTAL	3.61	1593.0	0																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	2.6	0																				
1 TO 2	0.01	1.0	1																				
2 TO 5	0.03	15.0	0																				
5 TO 10	0.03	16.4	0																				
10 TO 15	0.06	19.4	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.19	55.2	9																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1		2.6	0																				
1 TO 2	0.01	1.0	1																				
2 TO 5	0.03	19.0	0																				
5 TO 10	0.03	16.4	0																				
10 TO 15	0.06	19.4	0																				
15 TO 20	0.06	21.0	0																				
20 TO 25	0.06	32.5	0																				
25 TO 30	0.10	42.1	0																				
30 TO 35	2.03	1179.0	0																				
ABOVE 35	0.73	322.5	0																				
TOTAL	3.00	1048.1	9																				



TABLE D27  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
NAKE AIRPORT, NAKE ISLAND  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
MONTH OF APRIL

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.06	21.1	0																				
20 TO 25	0.06	22.5	0																				
25 TO 30	0.09	37.0	0																				
30 TO 35	3.22	1286.7	0																				
ABOVE 35	0.77	330.0	0																				
TOTAL	4.03	1499.0	0																				

STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.31	1.3	0																				
1 TO 2	0.32	3.7	0																				
2 TO 5	0.02	0.9	0																				
5 TO 10	0.34	12.9	0																				
10 TO 15	0.35	17.1	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.14	41.9	0																				

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.31	1.3	0																				
1 TO 2	0.32	3.7	0																				
2 TO 5	0.02	0.9	0																				
5 TO 10	0.34	12.9	0																				
10 TO 15	0.35	17.1	0																				
15 TO 20	0.36	21.1	0																				
20 TO 25	0.36	22.5	0																				
25 TO 30	0.09	37.0	0																				
30 TO 35	3.02	1286.7	0																				
ABOVE 35	0.77	330.0	0																				
TOTAL	4.14	1743.9	0																				

TABLE D27  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
NAKE AIRPORT, NAKE ISLAND  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
MONTH OF MAY

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.23	73.9	0																				
20 TO 25	0.19	76.0	0																				
25 TO 30	0.23	109.9	0																				
30 TO 35	2.70	1299.6	1																				
ABOVE 35	0.75	307.0	0																				
TOTAL	12.10	3507.2	1																				

STORM CONDITIONS																								
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
BELOW 1	0.03	9.2	4																					
1 TO 2	0.04	6.6	2									1		1	1									
2 TO 5	0.10	30.1	3										1											
5 TO 10	0.10	39.0	2																					
10 TO 15	0.10	39.0	0																					
15 TO 20	0.	0.	0																					
20 TO 25	0.	0.	0																					
25 TO 30	0.	0.	0																					
30 TO 35	0.	0.	0																					
ABOVE 35	0.	0.	0																					
TOTAL	0.61	190.0	11									1	1	4	4			1						

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.03	9.2	4									1		1	1								
1 TO 2	0.04	6.6	2										1	1									
2 TO 5	0.10	30.1	3													3							
5 TO 10	0.10	39.0	2												2								
10 TO 15	0.10	39.0	0																				
15 TO 20	0.20	73.9	0																				
20 TO 25	0.19	76.0	0																				
25 TO 30	0.23	109.9	0																				
30 TO 35	2.70	1299.6	1										1										
ABOVE 35	0.75	307.0	0											3									
TOTAL	12.70	3540.0	10									1	5	2	4			1					



TABLE D26a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
ANDERSON AB, GUAM

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.79	201.4	5																				
20 TO 25	1.13	431.9	1																				
25 TO 30	3.03	1939.1	3																				
30 TO 35	13.75	5020.7	12																				
ABOVE 35	5.2	2001.5	3																				
TOTAL	24.12	10663.0	24																				

STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.27	43.3	46									2	7	11	10	12	3	1					
1 TO 2	0.69	106.9	69							1	2	4	10	11	24	10	2	3					
2 TO 5	1.34	271.3	90									2	12	26	33	12	4	1					
5 TO 10	0.87	234.0	64									3	3	21	29	6	2						
10 TO 15	0.85	272.0	22									1	9	7	6	1	2						
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.69	297.7	0																				
ABOVE 35	0.	0.	0																				
TOTAL	4.65	1222.0	291							1	2	12	37	76	104	61	13	5					

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.27	43.0	46																				
1 TO 2	0.69	106.9	69								2	7	11	10	12	3	1						
2 TO 5	1.34	271.3	90						1	2	4	10	11	24	10	2	3						
5 TO 10	0.87	234.0	64								2	12	24	33	12	4	1						
10 TO 15	0.85	272.0	22								3	9	21	29	6	2							
15 TO 20	0.79	201.4	5								1	9	7	4	1	2							
20 TO 25	1.13	431.9	1											3	1	1							
25 TO 30	3.03	1939.1	3											1									
30 TO 35	13.94	6127.4	12											5									
ABOVE 35	5.72	2001.5	3											1									
TOTAL	29.37	11066.4	319						1	2	12	37	64	117	43	14	5						

TABLE D26b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
ANDERSON AB, GUAM  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.23	79.0	1																				
20 TO 25	0.42	194.1	1																				
25 TO 30	0.53	221.6	1																				
30 TO 35	3.03	1320.0	0																				
ABOVE 35	5.42	2444.0	3																				
TOTAL	9.63	4220.1	6																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	17.1	21																				
1 TO 2	0.27	43.0	24																				
2 TO 5	0.43	86.3	12																				
5 TO 10	0.30	76.2	10																				
10 TO 15	0.30	80.6	6																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.42	311.2	73																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.12	17.1	21									2	3	2	6	4	2						
1 TO 2	0.27	43.0	24								2	3	3	2	9	4	1						
2 TO 5	0.43	86.3	12									1	5	5	3								
5 TO 10	0.30	76.2	10										3	6	1								
10 TO 15	0.30	80.6	6										3	1	1	1							
15 TO 20	0.23	79.0	1											1									
20 TO 25	0.42	194.1	1											1									
25 TO 30	0.53	221.6	1										1										
30 TO 35	3.03	1320.0	0																				
ABOVE 35	5.42	2444.0	3										2		1								
TOTAL	11.35	4539.3	79								2	4	6	19	29	14	4	1					



TABLE D284  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
ANDERSON AB, GUAM  
FOR THE  
SUMMER SEASON

				NON-STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)												
BELOW 1	0.0	0.0	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.0	0.0	0													
2 TO 5	0.0	0.0	0													
5 TO 10	0.0	0.0	0													
10 TO 15	0.0	0.0	0													
15 TO 20	0.10	66.0	0										2	1	1	
20 TO 25	0.19	75.3	0													
25 TO 30	0.25	105.0	2										2			
30 TO 35	0.10	2344.6	0													
ABOVE 35	0.30	156.7	0													
TOTAL	0.10	2726.0	2										4	1	1	

				STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)												
BELOW 1	0.06	0.0	3	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.19	29.0	24													
2 TO 5	0.60	116.2	50													
5 TO 10	0.31	77.5	44													
10 TO 15	0.25	83.6	19													
15 TO 20	0.0	0.0	0													
20 TO 25	0.0	0.0	0													
25 TO 30	0.0	0.0	0													
30 TO 35	0.0	0.0	0													
ABOVE 35	0.0	0.0	0													
TOTAL	1.41	313.5	144										1	6	20	42

				STORM PLUS NON-STORM												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)												
BELOW 1	0.06	0.0	3	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.19	29.0	24													
2 TO 5	0.69	116.2	50													
5 TO 10	0.31	77.5	44													
10 TO 15	0.25	83.6	19													
15 TO 20	0.10	66.0	4													
20 TO 25	0.19	75.3	0													
25 TO 30	0.25	105.0	2													
30 TO 35	0.10	2344.6	0													
ABOVE 35	0.30	156.7	0													
TOTAL	1.91	3042.3	152										1	6	20	42

TABLE D284  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
ANDERSON AB, GUAM  
FOR THE  
AUTUMN SEASON

				NON-STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)												
BELOW 1	0.0	0.0	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.0	0.0	0													
2 TO 5	0.0	0.0	0													
5 TO 10	0.0	0.0	0													
10 TO 15	0.0	0.0	0													
15 TO 20	0.37	135.0	0													
20 TO 25	0.92	202.0	0													
25 TO 30	3.05	1211.9	0													
30 TO 35	5.34	2157.0	12													
ABOVE 35	0.0	0.0	0													
TOTAL	8.68	3736.7	12													

				STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)												
BELOW 1	0.09	0.0	22	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.17	34.1	21													
2 TO 5	0.30	72.0	20													
5 TO 10	0.27	81.1	10													
10 TO 15	0.20	69.0	1													
15 TO 20	0.0	0.0	0													
20 TO 25	0.0	0.0	0													
25 TO 30	0.0	0.0	0													
30 TO 35	0.09	207.7	0													
ABOVE 35	0.0	0.0	0													
TOTAL	1.02	308.0	74													

				STORM PLUS NON-STORM												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GSE DISTRIBUTION (FT./SEC.)												
BELOW 1	0.09	0.0	22	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.17	34.1	21													
2 TO 5	0.30	72.0	20													
5 TO 10	0.27	81.1	10													
10 TO 15	0.20	69.0	1													
15 TO 20	0.37	135.0	0													
20 TO 25	0.92	202.0	0													
25 TO 30	3.05	1211.9	0													
30 TO 35	5.73	2455.0	12													
ABOVE 35	0.0	0.0	0													
TOTAL	10.00	4304.0	64													



TABLE D88  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
ANDERSON AB, GUAM  
FOR THE  
MONTH OF JANUARY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.7	3.0	3																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.07	25.4	0																				
20 TO 25	0.24	86.0	0																				
25 TO 30	0.10	43.5	0																				
30 TO 35	0.15	64.9	0																				
ABOVE 35	2.72	1216.9	1																				
TOTAL	3.29	1436.6	1																				

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.7	1.3	14																				
1 TO 2	0.09	15.0	14																				
2 TO 5	0.23	44.3	11																				
5 TO 10	0.08	23.6	0																				
10 TO 15	0.06	23.0	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.94	113.2	39																				
				</																			

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.07	10.3	14																				
1 TO 2	0.09	15.0	14																				
2 TO 5	0.23	44.3	11																				
5 TO 10	0.08	23.6	0																				
10 TO 15	0.06	23.0	0																				
15 TO 20	0.07	25.4	0																				
20 TO 25	0.24	86.0	0																				
25 TO 30	0.10	43.5	0																				
30 TO 35	0.15	64.9	0																				
ABOVE 35	2.72	1216.9	1																				
TOTAL	3.83	1549.9	40																				

TABLE D89  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
ANDERSON AB, GUAM  
FOR THE  
MONTH OF FEBRUARY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.06	19.7	1																				
20 TO 25	0.08	30.0	1																				
25 TO 30	0.32	130.0	1																				
30 TO 35	0.10	43.0	0																				
ABOVE 35	2.69	1227.9	2																				
TOTAL	3.26	1460.2	5																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.0	0.0	0																				
1 TO 2	0.05	9.0	0																				
2 TO 5	0.12	20.3	1																				
5 TO 10	0.19	31.7	0																				
10 TO 15	0.16	39.0	0																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	0.49	99.0	21																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WDE DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.03	9.0	0																				
2 TO 5	0.12	20.3	1																				
5 TO 10	0.05	31.7	0																				
10 TO 15	0.16	39.0	0																				
15 TO 20	0.06	19.7	1																				
20 TO 25	0.08	30.0	1																				
25 TO 30	0.32	130.0	1																				
30 TO 35	0.10	43.0	0																				
ABOVE 35	2.69	1227.9	2																				
TOTAL	3.71	1556.0	26																				



TABLE D28a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES

AND  
ANDERSON AB, GUAM  
FOR THE  
MONTH OF JULY

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 15	0.	0.	0																				
15 TO 25	0.	0.	0																				
25 TO 35	0.38	30.7	4											2	1	1							
35 TO 55	0.40	32.8	4																				
55 TO 75	0.13	36.1	2																				
75 TO 95	2.45	1103.6	0																				
ABOVE 95	0.30	136.7	0																				
TOTAL	3.5	1359.9	6											4	1	1							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1																							
1 TO 2	0.25	7.3	2										1	1									
2 TO 5	0.23	45.5	5									2	3										
5 TO 15	0.11	36.8	0																				
15 TO 25	0.11	36.8	0																				
25 TO 35	0.	0.	0																				
35 TO 55	0.	0.	0																				
ABOVE 55	0.	0.	0																				
TOTAL	0.49	122.2	7									3	4										

STORM PLUS NON-STORM

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.45	7.3	2										1	1									
2 TO 5	0.23	45.5	5									2	3										
5 TO 15	0.11	36.8	0																				
15 TO 25	0.11	36.8	0																				
25 TO 35	0.40	32.8	4										2	1	1								
35 TO 55	0.13	36.1	2																				
55 TO 75	2.45	1103.6	0											2									
ABOVE 75	0.30	136.7	0																				
TOTAL	3.94	1400.1	13									3	6	1	1								

TABLE D28b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES

AND  
ANDERSON AB, GUAM  
FOR THE  
MONTH OF AUGUST

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 15	0.	0.	0																				
15 TO 25	0.	0.	0																				
25 TO 35	0.10	36.2	0																				
35 TO 55	0.11	42.9	0																				
55 TO 75	0.12	49.4	0																				
75 TO 95	2.73	1242.8	0																				
ABOVE 95	0.	0.	0																				
TOTAL	3.35	1368.9	0																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.36	6.4	3										2		1								
1 TO 2	0.14	22.9	22										1	2	5	4	1	3					
2 TO 5	0.37	60.7	53										2	8	16	15	8	4					
5 TO 15	0.20	46.9	44										3	2	15	17	5	2					
15 TO 25	0.14	46.8	15											5	4	5		1					
25 TO 35	0.	0.	0																				
35 TO 55	0.	0.	0																				
55 TO 75	0.	0.	0																				
75 TO 95	0.	0.	0																				
ABOVE 95	0.	0.	0																				
TOTAL	0.92	193.3	137																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.36	6.4	3										2		1								
1 TO 2	0.14	22.9	22								1	2	5	5	4	1							
2 TO 5	0.37	60.7	53									2	8	14	15	8	4						
5 TO 15	0.20	46.9	44									3	2	15	17	5	2						
15 TO 25	0.14	46.8	15									5	4	5		1							
25 TO 35	0.10	36.2	0																				
35 TO 55	0.11	42.9	0																				
55 TO 75	0.12	49.4	0																				
75 TO 95	2.73	1242.8	0																				
ABOVE 95	0.	0.	0																				
TOTAL	3.97	1562.2	137							1		6	17	42	42	18	8						



TABLE D28  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
ANDERSON AB, GUAM  
FOR THE  
MONTH OF NOVEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.37	139.0	0																				
20 TO 25	0.52	202.0	0																				
25 TO 30	1.35	1211.9	0																				
30 TO 35	5.44	2197.3	12																				
ABOVE 35	0.	0.	0										5	7									
TOTAL	8.68	3796.7	12										5	7									

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.39	14.5	22								1	5	6	4	5								
1 TO 2	0.17	34.1	21									1	4	4	11	2							
2 TO 5	0.30	73.8	24									1	5	10	3			1					
5 TO 10	0.27	81.1	10									1	3	6									
10 TO 15	0.29	99.0	1								1												
15 TO 20	0.00	0.0	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.00	0.0	0																				
30 TO 35	0.69	297.7	0																				
ABOVE 35	0.00	0.0	0																				
TOTAL	1.62	596.0	74								2	11	18	31	10	1	1						

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.39	14.5	22																				
1 TO 2	0.17	34.1	21																				
2 TO 5	0.30	73.8	24																				
5 TO 10	0.27	81.1	10																				
10 TO 15	0.29	99.0	1																				
15 TO 20	0.07	135.0	0																				
20 TO 25	0.52	292.6	0																				
25 TO 30	0.09	121.0	0																				
30 TO 35	0.73	2495.0	12																				
ABOVE 35	0.	0.	0																				
TOTAL	10.60	4354.6	86																				

TABLE D29  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
ANDERSON AB, GUAM  
FOR THE  
MONTH OF DECEMBER  
NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.10	35.5	0																				
20 TO 25	0.10	37.3	0																				
25 TO 30	0.10	39.2	0																				
30 TO 35	2.78	1219.3	0																				
ABOVE 35	0.	0.	0																				
TOTAL	3.08	1331.2	0																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.35	6.8	7										1	1	2	2							
1 TO 2	0.15	24.1	4												2								
2 TO 5	0.20	21.7	0																				
5 TO 10	0.26	22.8	2										1	1									
10 TO 15	0.28	28.8	0																				
15 TO 20	0.00	0.0	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.00	0.0	0																				
30 TO 35	0.00	0.0	0																				
ABOVE 35	0.00	0.0	0																				
TOTAL	0.43	102.3	13										1	2	4	4	2						

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.35	6.8	7									1	1	1	2	2							
1 TO 2	0.15	24.1	4												2								
2 TO 5	0.20	21.7	0																				
5 TO 10	0.26	22.8	2										1	1									
10 TO 15	0.28	28.8	0																				
15 TO 20	0.10	35.5	0																				
20 TO 25	0.10	37.3	0																				
25 TO 30	0.10	39.2	0																				
30 TO 35	2.78	1219.3	0																				
ABOVE 35	0.	0.	0																				
TOTAL	3.51	1433.5	13									1	2	4	4	2							



TABLE D29  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0	0	0																				
1 TO 2	0	0	0																				
2 TO 5	0	0	0																				
5 TO 10	0	0	0																				
10 TO 15	0	0	0																				
15 TO 20	2.09	730.9	7											2	5								
20 TO 25	6.69	2669.4	108											27	67	9	2		1				
25 TO 30	13.44	9829.4	92						1	1	1	4	27	44	12	2							
30 TO 35	31.26	13726.9	266								2	2	16	70	129	15	17	2	3			1	
ABOVE 35	32.25	14533.2	236								2	2	16	88	108	16	3	1					
TOTAL	85.74	37495.7	737						1	1	7	11	30	212	353	52	24	3	4				1

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.47	68.1	54																				
1 TO 2	1.16	180.7	130											2	12	15	10	7	5	2	1		
2 TO 5	2.69	490.4	282							2	4	5	27	33	47	17	9						
5 TO 10	1.76	551.2	137											2	15	43	46	19	8	2			
10 TO 15	2.10	683.6	62																				
15 TO 20	6.39	2766.2	7																				
20 TO 25	6.77	2697.5	108																				
25 TO 30	13.47	9811.1	92																				
30 TO 35	31.55	13959.3	265																				
ABOVE 35	32.25	14533.2	236																				
TOTAL	85.87	2265.5	667																				
						1	1		2	6	15	78	187	231	91	30	8	9					

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.47	68.1	54																				
1 TO 2	1.16	180.7	130											2	12	15	10	7	5	2	1		
2 TO 5	2.69	490.4	282							2	4	5	27	33	47	17	9						
5 TO 10	1.76	551.2	137											2	10	43	46	19	8	2			
10 TO 15	2.10	683.6	62																				
15 TO 20	2.18	766.2	7																				
20 TO 25	6.77	2697.5	108																				
25 TO 30	13.61	9881.1	92																				
30 TO 35	31.81	13959.3	265																				
ABOVE 35	32.25	14533.2	236																				
TOTAL	96.61	37761.2	1374																				

TABLE D29  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0	0	0																				
1 TO 2	0	0	0																				
2 TO 5	0	0	0																				
5 TO 10	0	0	0																				
10 TO 15	0	0	0																				
15 TO 20	6.67	235.0	0																				
20 TO 25	1.34	535.0	19										1	5	13		1	1					
25 TO 30	4.18	1862.2	0																				
30 TO 35	6.73	327.7	1																				
ABOVE 35	9.38	2438.6	1																				
TOTAL	12.30	5399.4	21										1	5	12		1	1					

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.35	7.0																					
1 TO 2	0.27	39.4	45											1	7	13	21	4	1				
2 TO 5	0.61	112.0	45											1	4	14	24	1	1				
5 TO 10	0.24	68.4	4																				
10 TO 15	0.73	244.3	18																				
15 TO 20	0	0	0																				
20 TO 25	0	0	0																				
25 TO 30	0	0	0																				
30 TO 35	0	0	0																				
ABOVE 35	0	0	0																				
TOTAL	1.90	471.9	120											2	14	36	57	6	4				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.35	7.0	0																				
1 TO 2	0.27	39.4	45									1	7	17	21	4				1			
2 TO 5	0.61	112.0	45									1	4	14	24	1	1						
5 TO 10	0.24	68.4	4																				
10 TO 15	0.73	244.3	18																				
15 TO 20	0.67	235.0	0																				
20 TO 25	1.34	535.0	19																				
25 TO 30	4.18	1862.2	0										1	5	10	1	1				1		
30 TO 35	6.73	327.7	1																				
ABOVE 35	9.38	2438.6	1													1							
TOTAL	14.20	5871.3	141									2	15	41	69	7	5				2		



TABLE D894  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS																						
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																		
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30
BELOW 1	0.17	24.3	23																			
1 TO 2	0.33	52.9	97																			
2 TO 5	0.70	155.9	113																			
5 TO 10	0.91	144.9	64																			
10 TO 15	0.57	182.4	9																			
15 TO 20	0.92	191.2	1																			
20 TO 25	2.35	930.3	6																			
25 TO 30	7.50	3242.3	57																			
30 TO 35	9.56	4303.3	69																			
ABOVE 35	13.48	8159.9	20																			
TOTAL	33.42	14973.1	193																			

STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	WDE DISTRIBUTION (FT./SEC.)												
											-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	24.3	23								2	6	5	3	4	1	1						
1 TO 2	0.33	52.9	57								2	13	14	16	7	9							
2 TO 5	0.70	155.9	113								1	17	20	39	16	7	2	1					
5 TO 10	0.91	144.9	64									3	10	27	14	1	1						
10 TO 15	0.57	182.4	9										2	6	1								
15 TO 20	0.92	191.2	1																				
20 TO 25	2.35	930.3	6																				
25 TO 30	7.50	3242.3	57																				
30 TO 35	9.56	4303.3	69																				
ABOVE 35	13.48	8159.9	20																				
TOTAL	2.36	560.3	266						1	1	5	39	67	91	62	14	4	2					

STORM PLUS NON-STORM																						
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																		
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30
BELOW 1	0.17	24.3	23																			
1 TO 2	0.33	52.9	97																			
2 TO 5	0.70	155.9	113																			
5 TO 10	0.91	144.9	64																			
10 TO 15	0.57	182.4	9																			
15 TO 20	0.92	191.2	1																			
20 TO 25	2.35	930.3	6																			
25 TO 30	7.50	3242.3	57																			
30 TO 35	9.56	4303.3	69																			
ABOVE 35	13.48	8159.9	20																			
TOTAL	33.79	15393.1	419																			

TABLE D894  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.42	144.9	5																				
20 TO 25	2.35	930.3	81																				
25 TO 30	6.99	264.4	7																				
30 TO 35	9.70	257.2	47																				
ABOVE 35	9.37	4101.7	195																				
TOTAL	18.92	8102.9	335																				

				STORM CONDITIONS																			
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	24.3	23																				
1 TO 2	0.33	52.9	97																				
2 TO 5	0.70	155.9	113																				
5 TO 10	0.91	144.9	64																				
10 TO 15	0.57	182.4	9																				
15 TO 20	0.92	191.2	1																				
20 TO 25	2.35	930.3	6																				
25 TO 30	7.50	3242.3	57																				
30 TO 35	9.56	4303.3	69																				
ABOVE 35	13.48	8159.9	20																				
TOTAL	1.83	462.4	97																				

STORM PLUS NON-STORM																						
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																		
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30
BELOW 1	0.30	11.9	10																			
1 TO 2	0.21	33.8	18																			
2 TO 5	0.69	123.9	50																			
5 TO 10	0.54	163.1	14																			
10 TO 15	0.40	193.9	3																			
15 TO 20	0.62	149.5	9																			
20 TO 25	2.36	900.0	61																			
25 TO 30	0.50	266.4	7																			
30 TO 35	9.70	2987.2	47																			
ABOVE 35	9.37	4101.7	195																			
TOTAL	20.35	8965.3	432																			



TABLE DOW  
FOR THE  
ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF JANUARY

NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (KTS./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	25.2	13																				
1 TO 2	0.36	54.6	10																				
2 TO 5	0.50	90.7	74																				
5 TO 10	0.47	127.4	44																				
10 TO 15	0.40	123.0	32																				
15 TO 20	0.09	27.2	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.17	51.7	0																				
30 TO 35	0.05	254.5	1																				
ABOVE 35	0.0	0.0	0																				
TOTAL	21.46	9100.3	190																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KTS./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	25.2	13																				
1 TO 2	0.36	54.6	10																				
2 TO 5	0.50	90.7	74																				
5 TO 10	0.47	127.0	44																				
10 TO 15	0.40	123.0	32																				
15 TO 20	0.09	27.2	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.17	51.7	0																				
30 TO 35	0.05	234.5	1																				
ABOVE 35	0.0	0.0	0																				
TOTAL	1.70	771.2	104																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KTS./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	25.2	13																				
1 TO 2	0.36	54.6	10																				
2 TO 5	0.50	90.2	74																				
5 TO 10	0.47	127.4	44																				
10 TO 15	0.40	123.0	32																				
15 TO 20	0.09	27.2	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.17	51.7	0																				
30 TO 35	0.05	254.5	1																				
ABOVE 35	0.00	0.0	0																				
TOTAL	24.26	9931.3	302																				

TABLE DOW  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF JANUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KTS./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	0.0	0																				
1 TO 2	0.0	0.0	0																				
2 TO 5	0.0	0.0	0																				
5 TO 10	0.0	0.0	0																				
10 TO 15	0.0	0.0	0																				
15 TO 20	0.49	169.7	0																				
20 TO 25	0.30	106.0	16										1	3	9	1	1			1			
25 TO 30	2.69	1180.0	0																				
30 TO 35	0.24	100.9	1												1								
ABOVE 35	2.77	1269.7	1																				
TOTAL	6.90	2043.0	10										1	3	11	1	1			1			

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (KTS./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	7.0	0																				
1 TO 2	0.12	17.0	22																				
2 TO 5	0.23	42.4	29																				
5 TO 10	0.11	32.5	3																				
10 TO 15	0.02	170.3	16																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.04	270.1	70																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (KTS./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	7.0	0																				
1 TO 2	0.12	17.0	22																				
2 TO 5	0.23	42.4	29																				
5 TO 10	0.11	32.5	3																				
10 TO 15	0.02	170.3	16																				
15 TO 20	0.0	0.0	0																				
20 TO 25	0.0	0.0	0																				
25 TO 30	0.0	0.0	0																				
30 TO 35	0.0	0.0	0																				
ABOVE 35	0.0	0.0	0																				
TOTAL	7.53	5181.9	66																				



TABLE D29  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF FEBRUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.10	34.9	0																				
20 TO 25	0.95	396.1	3											2	1								
25 TO 30	1.37	624.2	0																				
30 TO 35	0.20	126.9	0																				
ABOVE 35	0.	0.	0																				
TOTAL	2.70	1182.1	3											2	1								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.10	16.5	19										1	6	9	2	1						
2 TO 5	0.22	41.1	9										4	5									
5 TO 10	0.37	17.6	1										1										
10 TO 15	0.14	43.8	2										2										
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.53	118.9	31										1	13	14	2	1						

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.10	16.5	19										1	6	9	2	1						
2 TO 5	0.22	41.1	9										4	5									
5 TO 10	0.37	17.6	1										1										
10 TO 15	0.14	43.8	2										2										
15 TO 20	0.10	34.9	0																				
20 TO 25	0.95	396.1	3										2	1									
25 TO 30	1.37	624.2	0																				
30 TO 35	0.20	126.9	0																				
ABOVE 35	0.	0.	0																				
TOTAL	3.23	1301.0	34										1	15	15	2	1						

TABLE D29  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF MARCH

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.29	100.2	1																				
20 TO 25	1.99	788.4	4																				
25 TO 30	4.25	1831.4	30																				
30 TO 35	6.25	2610.9	59																				
ABOVE 35	10.75	4954.8	15																				
TOTAL	23.54	10931.0	112																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	15.4	11								1	4	4	1		1							
1 TO 2	0.20	32.3	32									0	7	0	5	4							
2 TO 5	0.52	102.3	65							1	1	1	13	16	20	7	3	2	1				
5 TO 10	0.31	85.3	44									3	11	19	9	1	1						
10 TO 15	0.34	104.0	7										1	6									
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.48	341.6	159							1	1	2	20	39	54	22	8	3	1				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	15.4	11																				
1 TO 2	0.20	32.3	32																				
2 TO 5	0.52	102.3	65																				
5 TO 10	0.31	85.3	44																				
10 TO 15	0.34	104.0	7																				
15 TO 20	0.29	100.2	1																				
20 TO 25	1.99	788.4	4																				
25 TO 30	4.25	1831.4	30																				
30 TO 35	6.25	2610.9	59																				
ABOVE 35	10.75	4954.8	15																				
TOTAL	23.52	10043.4	271																				



TABLE D2H  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF APRIL

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	3.11	39.3	0																				
20 TO 25	0.19	35.9	0																				
25 TO 30	2.98	1292.9	19											7	11	1							
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	3.10	1368.2	19											7	11	1							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.4	5.6	1																				
1 TO 2	0.37	11.1	17																				
2 TO 5	0.12	22.9	17																				
5 TO 10	0.10	24.0	14																				
10 TO 15	0.12	37.7	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.41	102.8	48											1	6	17	17	8	3				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.4	5.6	0																				
1 TO 2	0.37	11.1	17																				
2 TO 5	0.10	22.9	17																				
5 TO 10	0.10	24.0	14																				
10 TO 15	0.12	37.7	0																				
15 TO 20	0.11	39.3	0																				
20 TO 25	0.09	35.9	0																				
25 TO 30	2.98	1292.9	19											7	11	1							
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	3.59	1468.8	67											1	6	20	28	9	3				

TABLE D2H  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF MAY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.12	43.7	0																				
20 TO 25	0.27	114.0	2																				
25 TO 30	0.27	116.0	0																				
30 TO 35	3.31	1404.5	10																				
ABOVE 35	2.73	1295.1	10											1	5	4	1						
TOTAL	6.73	2963.3	22											1	12	8	1						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	4.0	12																				
1 TO 2	0.09	9.3	8																				
2 TO 5	0.15	30.3	31																				
5 TO 10	0.12	35.4	6																				
10 TO 15	0.12	38.7	2																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.47	117.7	59											2	5	15	20	12	3	1	1		

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	4.0	12																				
1 TO 2	0.09	9.3	8																				
2 TO 5	0.15	30.3	31																				
5 TO 10	0.12	35.4	6																				
10 TO 15	0.12	38.7	2																				
15 TO 20	0.12	43.7	0																				
20 TO 25	0.27	114.0	2																				
25 TO 30	0.27	116.0	0																				
30 TO 35	3.31	1404.5	10																				
ABOVE 35	2.73	1295.1	10											2	1	5	4	1					
TOTAL	7.17	3068.9	81											2	6	27	28	13	5	1	1		



TABLE D29  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF JUNE  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.20	31.9	0																				
20 TO 25	0.26	23.9	0																				
25 TO 30	0.11	47.3	0																				
30 TO 35	0.27	34.1	0																				
ABOVE 35	3.15	1491.6	36																				
TOTAL	3.47	1620.9	36																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.25	3.7	0																				
1 TO 2	0.04	6.0	7																				
2 TO 5	0.13	27.7	15																				
5 TO 10	0.27	22.9	0																				
10 TO 15	0.20	29.1	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.33	86.3	22								1	2	5	9	4	1							

STORM PLUS NON-STORM

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.25	3.7	0																				
1 TO 2	0.04	6.0	7																				
2 TO 5	0.13	27.7	15								1	2	1	2	1	1							
5 TO 10	0.27	22.9	0										4	7	3								
10 TO 15	0.20	29.1	0																				
15 TO 20	0.20	31.9	0																				
20 TO 25	0.06	23.9	0																				
25 TO 30	0.11	47.3	0																				
30 TO 35	0.27	34.1	0																				
ABOVE 35	3.15	1491.6	36							2	1	1	10	19	3								
TOTAL	3.81	1715.2	36							2	2	3	13	20	7	1							

TABLE D30  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF JULY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.23	82.1	2																				
20 TO 25	2.25	959.9	78																				
25 TO 30	0.37	151.5	7																				
30 TO 35	4.24	1004.2	41																				
ABOVE 35	4.19	1015.7	156																				
TOTAL	11.23	4039.4	284																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.77	10.3	10																				
1 TO 2	0.11	10.3	11																				
2 TO 5	0.42	83.1	23																				
5 TO 10	0.36	100.6	3																				
10 TO 15	0.21	68.5	2																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.17	288.9	49																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.77	10.3	10									2	1	1									
1 TO 2	0.11	10.3	11									2	2	2									
2 TO 5	0.42	83.1	23								1	4	9	5	3	1							
5 TO 10	0.36	100.6	3								1	1	1										
10 TO 15	0.21	68.5	2									1		1									
15 TO 20	0.23	82.1	2										1										
20 TO 25	2.20	905.9	78																				
25 TO 30	0.37	151.5	7								3	15	51	8	1								
30 TO 35	4.24	1004.2	41																				
ABOVE 35	4.19	1015.7	156								3	4	11	15	3	4							
TOTAL	12.41	5126.2	333								5	13	59	49	11	2							
											9	29	103	193	31	12							



**TABLE 700**  
**DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY**  
**FOR THE ROUTE BETWEEN**  
**CLARK AB, PHILIPPINES**  
**AND**  
**YOKOTA AB, JAPAN**  
**FOR THE**  
**MONTH OF SEPTEMBER**

**NON-STORM CONDITIONS**

				GUST DISTRIBUTION (FT./SEC.)																			
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
0 TO 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.0	0																				
5 TO 10	0.10	20.4	1																				
10 TO 15	0.10	20.4	1																				
15 TO 20	0.12	27.0	0																				
20 TO 25	1.07	200.0	0																				
25 TO 30	2.00	274.4	3																				
ABOVE 30																							
TOTAL	3.32	1094.6	15																				

**STORM CONDITIONS**

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(HOURS)		MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
0 TO 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	13.1	12																				
5 TO 10	0.10	20.7	13																				
10 TO 15	0.11	25.4	1																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	3.32	87.2	26																				

**STORM PLUS NON-STORM**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
0 TO 1	0.00	0.0	0																				
1 TO 2	0.00	9.5	0																				
2 TO 5	0.00	13.1	12																				
5 TO 10	0.10	20.7	13																				
10 TO 15	0.11	25.4	1																				
15 TO 20	0.10	20.4	1																				
20 TO 25	0.10	20.3	3																				
25 TO 30	0.12	27.0	0																				
30 TO 35	1.07	200.0	0																				
ABOVE 35	2.00	274.4	3																				
TOTAL	4.14	1721.0	41																				

**TABLE 700A**  
**DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY**  
**FOR THE ROUTE BETWEEN**  
**CLARK AB, PHILIPPINES**  
**AND**  
**YOKOTA AB, JAPAN**  
**FOR THE**  
**MONTH OF SEPTEMBER**

**NON-STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
0 TO 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.21	77.1	0																				
20 TO 25	0.10	61.0	1																				
25 TO 30	0.30	140.3	20																				
30 TO 35	7.40	3154.0	134																				
ABOVE 35	0.00	21.0	0																				
TOTAL	8.10	3453.7	165																				

**STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
0 TO 1	0.00	7.7	1												1								
1 TO 2	0.12	10.2	0																				
2 TO 5	0.15	22.7	20								2	1	2	11	9	6	2			2			
5 TO 10	0.14	40.0	12											2	1	2	5	1					
10 TO 15	0.12	41.2	6											4	2								
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.90	140.6	34								2	2	2	17	12	9	7	1	2				

**STORM PLUS NON-STORM**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
0 TO 1	0.00	7.7	1																				
1 TO 2	0.12	10.2	0																				
2 TO 5	0.15	22.7	20																				
5 TO 10	0.30	40.0	12																				
10 TO 15	0.12	41.2	6																				
15 TO 20	0.21	77.1	0																				
20 TO 25	0.10	61.0	1																				
25 TO 30	0.30	140.3	20																				
30 TO 35	7.40	3154.0	134																				
ABOVE 35	0.00	21.0	0																				
TOTAL	8.10	3453.7	165																				



TABLE D29a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF OCTOBER  
NON-STORM CONDITIONS

ALTITUDE FOOT	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.0	0																				
5 TO 10	0.00	0.0	0																				
10 TO 15	0.00	0.0	0																				
15 TO 20	0.12	34.7	1																				
20 TO 25	0.35	119.0	1																				
25 TO 30	0.55	234.3	0																				
30 TO 35	2.79	1217.5	0																				
ABOVE 35	3.00	1500.1	20										1	0	10		1						
TOTAL	7.41	3100.5	22										1	0	12		1						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	1																				
1 TO 2	0.00	13.0	13										2	3	5	3							
2 TO 5	0.26	45.7	20						1	1		3	6	8	7	1			1				
5 TO 10	0.15	40.1	23								1	3	9	7	1	2							
10 TO 15	0.13	37.2	23				1	1			2	7	6	3	3	1	1	3					
15 TO 20	0.35	119.0	0																				
20 TO 25	0.55	234.3	0																				
25 TO 30	2.79	1217.5	0																				
30 TO 35	3.00	1500.1	20																				
ABOVE 35	0.0	0.0	0																				
TOTAL	6.00	191.0	80				1	1		1	3	3	8	25	23	14	6	1	4				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	1																				
1 TO 2	0.00	13.0	15									2	3	5	3								
2 TO 5	0.26	45.7	24						1	1		3	6	8	7	1			1				
5 TO 10	0.15	40.1	23								1	3	9	7	1	2							
10 TO 15	0.13	37.2	23								2	2	6	3	3	1	1	3					
15 TO 20	0.17	52.0	1												1								
20 TO 25	0.40	130.2	1												1								
25 TO 30	0.50	245.7	0																				
30 TO 35	2.79	1217.5	0																				
ABOVE 35	3.00	1500.1	20									1	8	10		1							
TOTAL	6.21	3360.3	110									3	33	35	14	5	1	4					

TABLE D29b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF NOVEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.0	0																				
5 TO 10	0.00	0.0	0																				
10 TO 15	0.00	0.0	0																				
15 TO 20	0.14	51.5	0																				
20 TO 25	0.13	49.7	0																				
25 TO 30	0.25	109.9	0																				
30 TO 35	0.10	2100.1	11																				
ABOVE 35	0.37	165.0	0																				
TOTAL	5.09	2550.1	11																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	11																				
1 TO 2	0.14	23.3	5																				
2 TO 5	0.30	19.0	11																				
5 TO 10	0.10	46.9	11																				
10 TO 15	0.14	45.4	3																				
15 TO 20	0.34	9.1	0																				
20 TO 25	0.32	5.9	0																				
25 TO 30	0.14	40.2	0																				
30 TO 35	0.55	234.5	1																				
ABOVE 35	0.00	0.0	0																				
TOTAL	1.40	430.7	42																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	13.7	11																				
1 TO 2	0.14	23.3	5									1	1	1	1								
2 TO 5	0.09	19.0	11									1	3	6									
5 TO 10	0.10	46.9	11									1	5	3	2								
10 TO 15	0.14	45.4	3									1	1	1									
15 TO 20	0.10	63.5	0																				
20 TO 25	0.15	55.5	0																				
25 TO 30	0.30	109.9	0																				
30 TO 35	0.55	234.5	12											2	9	1							
ABOVE 35	0.37	165.0	0																				
TOTAL	7.29	2996.0	53									1	6	16	23	4	3						



TABLE 209  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
YOKOTA AB, JAPAN  
FOR THE  
MONTH OF DECEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.06	30.6	0																				
20 TO 25	0.06	32.9	0																				
25 TO 30	0.12	49.6	0																				
30 TO 35	0.21	91.9	0																				
ABOVE 35	2.62	1166.9	0																				
TOTAL	3.11	1379.5	0																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.04	5.0	4								2		1		1								
1 TO 2	0.16	29.3	7								1	1	2	3									
2 TO 5	0.06	16.3	0																				
5 TO 10	0.07	22.3	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.33	76.9	11								1	3	2	4	1								

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.04	5.0	4																				
2 TO 5	0.16	29.3	7																				
5 TO 10	0.06	16.3	0																				
10 TO 15	0.07	22.3	0																				
15 TO 20	0.06	30.6	0																				
20 TO 25	0.06	32.9	0																				
25 TO 30	0.12	49.6	0																				
30 TO 35	0.21	91.9	0																				
ABOVE 35	2.62	1166.9	0																				
TOTAL	3.44	1446.4	11																				



TABLE D30a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	3.01	1373.3	23																				
20 TO 25	6.40	2929.9	20																				
25 TO 30	14.27	6300.5	42																				
30 TO 35	24.79	10892.6	26																				
ABOVE 35	16.96	7735.0	39																				
TOTAL	66.31	28990.2	150																				

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.50	84.3	135				1	1		5	11	24	12	29	31	12	5	2					
1 TO 2	1.10	186.7	229				2			7	11	24	44	62	57	13	5	1	1				
2 TO 5	3.57	702.0	192							5	13	54	102	128	62	21	4	1	1	1			
5 TO 10	3.94	1819.2	195						1	2	4	15	94	90	11	0	0	1	1				
10 TO 15	2.08	933.7	102				2	1	1	1	4	4	34	37	9	7	2	1					
15 TO 20	0.52	5.0	1																				
20 TO 25	0.62	5.3	0																				
25 TO 30	0.06	23.2	1																				
30 TO 35	1.35	588.7	65								2	2	16	30	5	2							
ABOVE 35	0.00	0.0	0																				
TOTAL	13.60	5551.7	1119				1	5	2	20	45	125	264	305	175	63	24	6	3	1			

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.50	84.3	135				1	1		5	11	26	12	29	31	12	9	2					
1 TO 2	1.10	186.7	229				2			7	11	24	46	62	97	13	9	1	1				
2 TO 5	3.57	702.0	192							5	13	54	172	120	62	21	4	1	1	1			
5 TO 10	3.94	1819.2	195						1	2	4	15	94	90	11	6	8	1					
10 TO 15	2.08	933.7	102				2	1	1	4	4	34	37	9	7	2	1						
15 TO 20	3.82	1386.1	23								2	7	13	1									
20 TO 25	6.50	2335.1	24								1	1	8	10	1								
25 TO 30	14.34	6089.6	43							1	1	4	14	21	2								
30 TO 35	26.14	11481.3	91								2	9	27	90	7	2							
ABOVE 35	16.96	7735.0	39									1	14	19	9								
TOTAL	79.91	32153.6	1277				1	5	2	21	46	134	318	467	106	63	24	6	9	1			

TABLE D30b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.09	396.7	2																				
20 TO 25	3.16	1279.9	2																				
25 TO 30	5.00	2190.2	1																				
30 TO 35	8.84	3941.5	0																				
ABOVE 35	3.62	1641.7	0																				
TOTAL	21.00	9458.0	13																				

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.23	31.5	77				1	1			2	6	9	5	10	20	10	3	2				
1 TO 2	0.33	51.0	65					1			4	7	7	14	21	22	9	2	1	1			
2 TO 5	0.91	191.5	130							1	7	10	36	43	10	7	2						
5 TO 10	1.69	292.0	20									1	11	0									
10 TO 15	1.36	359.5	32									1	10	11	1	1							
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	3.63	986.3	344				1	2		9	20	34	64	101	61	21	7	3	1				

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.22	31.5	77				1	1		2	6	9	5	10	20	10			3	2			
1 TO 2	0.33	51.0	65					1		6	7	7	14	21	22	3	2	1	1				
2 TO 5	0.91	191.5	130							1	7	16	36	43	10	7	2						
5 TO 10	1.36	359.5	26									1	11	8									
10 TO 15	1.09	396.7	32									1	10	11	1	1							
15 TO 20	1.09	396.7	2											1	2								
20 TO 25	3.16	1279.9	2												1								
25 TO 30	5.00	2190.2	1												1								
30 TO 35	8.84	3941.5	0																				
ABOVE 35	3.62	1641.7	0									1	5	2									
TOTAL	25.42	10364.3	357				1	2		9	20	39	91	104	61	21	7	3	1				



TABLE D004  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS																							
			GUST DISTRIBUTION (FT./SEC.)																				
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.35	513.6	3																				
20 TO 25	1.51	590.4	2																				
25 TO 30	2.99	1293.6	5																				
30 TO 35	3.02	1083.0	3																				
ABOVE 35	10.96	4061.7	10																				
TOTAL	2.24	8011.1	31																				
														</									

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.13	10.2	12										1	4	3	3		1					
1 TO 2	1.33	53.3	66					1		1	2	6	12	20	17	5	2						
2 TO 5	1.27	242.1	195							3	3	20	53	60	29	10					1		
5 TO 10	1.60	416.0	195						1	2	4	13	37	71	9	0	0	0	1	1			
10 TO 15	0.66	217.2	24						1		2		4	14	2	1							
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	4.37	944.9	492					1	2	6	11	40	110	176	60	24	11		1	1	1		

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.13	10.2	12																				
1 TO 2	1.35	513.6	66				1			1	2	4	12	20	17	5	2						
2 TO 5	1.27	242.1	195							3	3	20	35	60	29	10							
5 TO 10	1.68	416.0	195						1	2	4	13	37	71	9	8		1		1			
10 TO 15	0.66	217.2	24						1		2		4	14	2	1							
15 TO 20	1.35	513.6	3											3									
20 TO 25	1.51	590.4	2											2									
25 TO 30	2.99	1293.6	5											1									
30 TO 35	3.02	1083.0	3											3									
ABOVE 35	10.96	4061.7	10											1	7	8	2						
TOTAL	24.31	9095.6	403				1	2	6	11	50	123	190	62	24	11	1	1	1	1			

TABLE D004  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	6.37	124.0	11																				
20 TO 25	0.66	249.7	6																				
25 TO 30	2.47	197.1	4																				
30 TO 35	3.94	1576.1	2																				
ABOVE 35	2.77	1232.3	21																				
TOTAL	7.81	3570.9	44																				

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.36	6.4	1										1										
1 TO 2	0.11	10.9	5											1	1	3							
2 TO 5	0.45	87.1	16										4	1	3	6	1	1					
5 TO 10	0.30	96.0	9											3	6								
10 TO 15	0.44	143.1	42				2		1	2	3	10	11	6	4	2	1						
15 TO 20	0.37	124.0	11																				
20 TO 25	0.66	249.7	6																				
25 TO 30	0.47	197.1	4																				
30 TO 35	3.94	1576.1	2																				
ABOVE 35	2.77	1232.3	21																				
TOTAL	1.45	355.0	73				2		1	2	6	15	21	15	5	3	1						

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	1																				
1 TO 2	0.11	10.9	5									1		1	1	3							
2 TO 5	0.45	87.1	16									4	1	3	6	1	1						
5 TO 10	0.30	96.0	9										1		6								
10 TO 15	0.44	143.1	42				2			1	2	3	17	11	6	4	2	1					
15 TO 20	0.37	124.0	11									2	2	6	1								
20 TO 25	0.66	249.7	6											3	3								
25 TO 30	0.47	197.1	4											1	3								
30 TO 35	3.94	1576.1	2																				
ABOVE 35	2.77	1232.3	21											7	11	3							
TOTAL	9.25	3732.5	117				2			1	2	10	29	44	29	2	3	1					



TABLE D300  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
AUTUMN SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.99	349.2	7											5	2								
20 TO 25	1.15	442.9	18										1	4	12	1							
25 TO 30	5.74	2371.6	32								1	1	3	9	16	2							
30 TO 35	8.99	3691.2	18											2	10	1							
ABOVE 35	0.	0.	0																				
TOTAL	18.47	6890.9	70								1	1	4	20	40	4							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	26.2	45							3	5	15	3	8	0	2							
1 TO 2	0.40	66.5	73							2	11	19	20	15	5	1							
2 TO 5	0.93	182.1	51							1	3	6	12	14	9	3	1	1	1				
5 TO 10	0.78	213.6	11									1	3	5	2								
10 TO 15	3.72	233.9	4										2	1		1							
15 TO 20	0.02	9.8	0																				
20 TO 25	0.02	9.3	0																				
25 TO 30	0.36	29.2	1																				
30 TO 35	1.35	589.7	65								2	2	16	38	5	2							
ABOVE 35	0.	0.	0																				
TOTAL	4.45	1347.2	250							4	12	35	55	87	39	13	3	1	1				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	26.2	45							3													
1 TO 2	0.40	66.5	73																				
2 TO 5	0.93	182.1	51																				
5 TO 10	0.78	213.6	11																				
10 TO 15	0.72	233.9	4																				
15 TO 20	1.01	351.0	7																				
20 TO 25	1.17	448.1	16																				
25 TO 30	5.80	2394.0	33																				
30 TO 35	9.93	4279.9	78																				
ABOVE 35	0.	0.	0																				
TOTAL	20.92	8199.1	320																				
														5	13	39	75	127	43	13	3	1	1

TABLE D301  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
MONTH OF JANUARY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.34	126.4	0																				
20 TO 25	0.74	296.6	0																				
25 TO 30	1.73	735.8	0																				
30 TO 35	3.24	1427.5	0																				
ABOVE 35	1.84	836.7	0																				
TOTAL	7.90	3423.3	0																				

STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	26.2	9																				
1 TO 2	0.16	24.5	37																				
2 TO 5	0.26	59.0	47																				
5 TO 10	0.29	83.4	5																				
10 TO 15	3.27	92.1	3																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.36	269.5	101																				
														2	3	10	26	39	14	4	2	1	

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	26.2	9																				
1 TO 2	0.16	24.5	37																				
2 TO 5	0.26	59.0	47								2	1	4	9	13	5	1	1	1				
5 TO 10	0.29	83.4	5								1	4	12	19	8	2	1						
10 TO 15	0.27	92.1	3									1	2	2									
15 TO 20	0.34	126.4	0										2	1									
20 TO 25	0.74	296.6	0																				
25 TO 30	1.73	735.8	0																				
30 TO 35	3.24	1427.5	0																				
ABOVE 35	1.84	836.7	0																				
TOTAL	8.96	3692.5	131								2	3	10	26	39	14	4	2	1				



TABLE D998  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
MONTH OF FEBRUARY

				NON-STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
BELOW 1	0.00	0.0	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.00	0.0	0													
2 TO 5	0.00	0.0	0													
5 TO 10	0.00	0.0	0													
10 TO 15	0.00	0.0	0													
15 TO 20	0.38	39.0	0													
20 TO 25	0.15	59.2	0													
25 TO 30	1.00	790.3	0													
30 TO 35	0.00	0.0	0													
ABOVE 35	0.00	0.0	0													
TOTAL	2.53	879.5	0													

				STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
BELOW 1	0.02	3.0	17	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.02	3.7	14													
2 TO 5	0.10	19.1	24													
5 TO 10	0.07	17.7	0													
10 TO 15	0.07	21.4	0													
15 TO 20	0.00	0.0	0													
20 TO 25	0.00	0.0	0													
25 TO 30	0.00	0.0	0													
30 TO 35	0.00	0.0	0													
ABOVE 35	0.00	0.0	0													
TOTAL	0.28	64.9	55													

				STORM PLUS NON-STORM												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
BELOW 1	0.02	3.0	17	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.02	3.7	14													
2 TO 5	0.10	19.1	24													
5 TO 10	0.07	17.7	0													
10 TO 15	0.07	21.4	0													
15 TO 20	0.00	0.0	0													
20 TO 25	0.15	59.2	0													
25 TO 30	1.00	790.3	0													
30 TO 35	0.00	0.0	0													
ABOVE 35	0.00	0.0	0													
TOTAL	2.31	944.4	55													

TABLE D999  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
MONTH OF MARCH

				NON-STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
BELOW 1	0.00	0.0	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.00	0.0	0													
2 TO 5	0.00	0.0	0													
5 TO 10	0.00	0.0	0													
10 TO 15	0.00	0.0	0													
15 TO 20	0.00	313.4	1													
20 TO 25	0.52	209.9	0													
25 TO 30	0.20	85.4	0													
30 TO 35	0.19	85.0	0													
ABOVE 35	2.40	1111.9	0													
TOTAL	4.12	1859.5	1													

				STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
BELOW 1	0.23	4.7	8	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.15	14.1	33													
2 TO 5	0.07	89.1	114													
5 TO 10	0.00	109.0	49													
10 TO 15	0.10	34.5	1													
15 TO 20	0.00	0.0	0													
20 TO 25	0.00	0.0	0													
25 TO 30	0.00	0.0	0													
30 TO 35	0.00	0.0	0													
ABOVE 35	0.00	0.0	0													
TOTAL	1.39	311.4	205													

				STORM PLUS NON-STORM												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)												
BELOW 1	0.23	4.7	8	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
1 TO 2	0.15	14.1	33													
2 TO 5	0.07	89.1	114													
5 TO 10	0.00	109.0	49													
10 TO 15	0.10	34.5	1													
15 TO 20	0.00	313.4	1													
20 TO 25	0.52	209.9	0													
25 TO 30	0.20	85.4	0													
30 TO 35	0.19	85.0	0													
ABOVE 35	2.40	1111.9	0													
TOTAL	5.51	2116.9	206													



**TABLE D01**  
**DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY**  
**FOR THE ROUTE BETWEEN**  
**CLARK AB, PHILIPPINES**  
**AND**  
**SAIGON, TAN SON NHUT A/D, VIETNAM**  
**FOR THE**  
**MONTH OF APRIL**

**NON-STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.31	111.0	0																				
20 TO 25	0.73	245.6	1																				
25 TO 30	2.90	1000.5	5																				
30 TO 35	3.26	1439.7	0																				
ABOVE 35	3.32	1542.4	0																				
TOTAL	10.12	4632.2	6																				

**STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	11.2	4																				
1 TO 2	0.13	20.6	23							1	1	2	0	6	1		2	1					
2 TO 5	0.53	104.3	69							1	1	13	17	22	9		6	7					
5 TO 10	0.64	193.5	104						1	2	2	9	22	47	7					1			
10 TO 15	0.33	104.3	15						1		2		4	7			1						
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.71	394.0	219						2	4	6	29	40	82	23	15	9			1			

**STORM PLUS NON-STORM**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.30	11.2	4							1	1	1					1						
1 TO 2	0.13	20.6	23											6	4	2							
2 TO 5	0.53	104.3	69							1	1	13	17	22	9	6							
5 TO 10	0.64	193.5	104						1	2	2	9	22	47	7	6	7			1			
10 TO 15	0.33	104.3	15						1		2		4	7		1							
15 TO 20	0.31	111.0	0																				
20 TO 25	0.73	245.6	1																				
25 TO 30	2.90	1000.5	5											1									
30 TO 35	3.26	1439.7	0											1									
ABOVE 35	3.32	1542.4	0																				
TOTAL	11.03	4016.2	219						2	4	4	25	50	64	23	15	9			1			

**TABLE D02**  
**DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY**  
**FOR THE ROUTE BETWEEN**  
**CLARK AB, PHILIPPINES**  
**AND**  
**SAIGON, TAN SON NHUT A/D, VIETNAM**  
**FOR THE**  
**MONTH OF MAY**

**NON-STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.24	89.2	2																				
20 TO 25	0.20	102.0	1																				
25 TO 30	0.29	124.6	2																				
30 TO 35	0.36	159.2	3																				
ABOVE 35	0.04	2207.4	10																				
TOTAL	0.00	2603.4	26																				

**STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.32	2.2	0																				
1 TO 2	0.10	15.5	10																				
2 TO 5	0.20	40.7	12																				
5 TO 10	0.30	94.3	2																				
10 TO 15	0.23	70.4	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.90	239.2	32																				

**STORM PLUS NON-STORM**

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.32	2.2	0																				
1 TO 2	0.10	15.5	10										1	1	4	3	1						
2 TO 5	0.20	40.7	12										1	4	4	2	1						
5 TO 10	0.30	94.3	2																				
10 TO 15	0.23	70.4	0																				
15 TO 20	0.24	89.2	2																				
20 TO 25	0.20	102.0	1																				
25 TO 30	0.29	124.6	2																				
30 TO 35	0.36	159.2	3																				
ABOVE 35	0.04	2207.4	10																				
TOTAL	0.90	2603.5	30																				



TABLE D30  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
MONTH OF JULY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.15	94.0	0																				
20 TO 25	0.27	107.0	0																				
25 TO 30	0.21	90.0	1																				
30 TO 35	1.09	842.4	2											1	1	1							
ABOVE 35	1.47	665.0	0																				
TOTAL	4.00	1799.0	3											1	1	1							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	1										1										
1 TO 2	0.00	9.1	0																				
2 TO 5	0.23	46.4	4										2	1	2	1							
5 TO 10	0.22	93.3	2										2										
10 TO 15	0.16	94.0	10										4	4	2								
15 TO 20	0.00	0.0	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.00	0.0	0																				
30 TO 35	0.00	0.0	0																				
ABOVE 35	0.00	0.0	0																				
TOTAL	1.71	169.0	19										3	7	6	3							

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	1										1										
1 TO 2	0.06	9.1	0																				
2 TO 5	0.23	46.4	4										2	1	2	1							
5 TO 10	0.22	93.3	2										2										
10 TO 15	0.16	94.0	10										4	4	2								
15 TO 20	0.15	94.0	0																				
20 TO 25	0.27	137.6	0																				
25 TO 30	0.21	90.9	1																				
30 TO 35	1.09	842.4	2										1	1	1								
ABOVE 35	1.47	665.0	0																				
TOTAL	4.71	1924.0	22										3	6	7	4							

TABLE D30  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
MONTH OF AUGUST  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.0	0																				
5 TO 10	0.00	0.0	0																				
10 TO 15	0.00	0.0	0																				
15 TO 20	0.22	70.0	11										2	2	4	1							
20 TO 25	0.38	141.1	4										3	3									
25 TO 30	0.26	129.0	3										1	2									
30 TO 35	1.65	739.6	0																				
ABOVE 35	1.30	567.3	21										2	7	11	3							
TOTAL	3.41	1623.9	41										2	13	22	4							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	1.9	0																				
1 TO 2	0.39	9.0	5										1	1	3								
2 TO 5	0.21	43.0	10									2	1	1	5	1	1						
5 TO 10	0.17	43.1	7										1	0									
10 TO 15	0.20	89.1	32																				
15 TO 20	0.00	0.0	0																				
20 TO 25	0.00	0.0	0																				
25 TO 30	0.00	0.0	0																				
30 TO 35	0.00	0.0	0																				
ABOVE 35	0.00	0.0	0																				
TOTAL	1.75	164.6	54										2	1	2	5	4	15	12	5	3	1	

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	1.9	0																				
1 TO 2	0.39	9.0	5										1	1	3								
2 TO 5	0.21	43.0	10									2	1	5	1	1							
5 TO 10	0.17	43.1	7										1	0									
10 TO 15	0.20	89.1	32										6	7	4	4	2	1					
15 TO 20	0.22	70.0	11										2	2	4	1							
20 TO 25	0.38	141.1	4										3	3									
25 TO 30	0.26	129.0	3										1	2									
30 TO 35	1.65	739.6	0																				
ABOVE 35	1.30	567.3	21										7	11	3								
TOTAL	4.94	1088.5	65										2	1	2	7	21	37	16	5	3	1	



TABLE D30a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
MONTH OF OCTOBER

				NON-STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0	0	0													
1 TO 2	0	0	0													
2 TO 5	0	0	0													
5 TO 10	0	0	0													
10 TO 15	0	0	0													
15 TO 20	0.03	219.0	6											5	1	
20 TO 25	0.77	293.0	15										1	4	9	1
25 TO 30	2.22	928.1	2											2		
30 TO 35	6.00	3007.0	13											2	10	1
ABOVE 35	0	0	0													
TOTAL	10.43	4449.4	36										1	13	20	2

				STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.12	18.9	43													
1 TO 2	0.31	53.2	61													
2 TO 5	0.55	111.1	41													
5 TO 10	0.50	133.0	4													
10 TO 15	0.46	149.2	4													
15 TO 20	0.32	5.8	0													
20 TO 25	0.22	5.3	0													
25 TO 30	0.32	9.6	1													
30 TO 35	1.35	568.7	65													
ABOVE 35	0	0	0													
TOTAL	3.35	1073.7	210													

				STORM PLUS NON-STORM												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.12	18.9	43													
1 TO 2	0.31	53.2	61													
2 TO 5	0.55	110.1	40													
5 TO 10	0.50	133.0	4													
10 TO 15	0.46	149.2	4													
15 TO 20	0.03	225.5	6													
20 TO 25	0.78	299.0	15													
25 TO 30	2.25	937.7	3													
30 TO 35	8.15	3996.5	70													
ABOVE 35	0	0	0													
TOTAL	13.70	5523.2	294													

TABLE D30b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
MONTH OF NOVEMBER

				NON-STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0	0	0													
1 TO 2	0	0	0													
2 TO 5	0	0	0													
5 TO 10	0	0	0													
10 TO 15	0	0	0													
15 TO 20	0.34	128.5	1													
20 TO 25	0.39	149.1	3													
25 TO 30	2.51	1443.5	35													
30 TO 35	1.70	683.4	0													
ABOVE 35	0	0	0													
TOTAL	6.04	2401.5	34													

				STORM CONDITIONS												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.08	7.3	2													
1 TO 2	0.39	13.3	12													
2 TO 5	0.30	72.0	11													
5 TO 10	0.20	80.6	7													
10 TO 15	0.26	84.7	0													
15 TO 20	0	0	0													
20 TO 25	0	0	0													
25 TO 30	0.4	15.6	0													
30 TO 35	0	0	0													
ABOVE 35	0	0	0													
TOTAL	1.13	272.5	32													

				STORM PLUS NON-STORM												
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.35	7.3	2													
1 TO 2	0.39	13.3	12													
2 TO 5	0.30	72.0	11													
5 TO 10	0.20	80.6	7													
10 TO 15	0.26	84.7	0													
15 TO 20	0.36	128.5	1													
20 TO 25	0.39	149.1	3													
25 TO 30	2.55	1443.2	30													
30 TO 35	1.70	683.4	0													
ABOVE 35	0	0	0													
TOTAL	7.14	2675.0	66													



TABLE D86  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
CLARK AB, PHILIPPINES  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
MONTH OF DECEMBER

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.67	240.3	2																				
20 TO 25	2.27	924.1	2																				
25 TO 30	1.95	672.1	1																				
30 TO 35	5.60	2514.0	0																				
ABOVE 35	1.70	605.0	0																				
TOTAL	11.07	5135.0	13											1	7	5							

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.14	10.9	51				1	1		2	4	7	2	8	14	7	3	2					
1 TO 2	0.19	22.0	34				1			4	5	1	2	6	12	1	1						
2 TO 5	0.95	112.5	99							1	4	10	17	17	6	4							
5 TO 10	0.73	191.7	15										9	6									
10 TO 15	0.72	226.0	29										1	16	10	1	1						
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	2.29	572.0	100				1	2		7	13	19	46	47	33	13	4	2	1				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.14	10.9	51				1	1		2	4	7	2	8	14	7	3	2					
1 TO 2	0.19	22.0	34				1			4	5	1	2	6	12	1	1						
2 TO 5	0.95	112.5	99							1	4	10	17	17	6	4							
5 TO 10	0.73	191.7	15										9	6									
10 TO 15	0.72	226.0	29										1	16	10	1	1						
15 TO 20	0.67	240.3	2											2									
20 TO 25	2.27	924.1	2											1	1								
25 TO 30	1.95	672.1	1																				
30 TO 35	5.60	2514.0	0											1	5	2							
ABOVE 35	1.70	605.0	0																				
TOTAL	14.16	5727.5	201				1	2		7	13	20	55	52	33	13	4	2	1				



TABLE D10  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
YOKOTA AB, JAPAN  
AND  
SAIGON, TAN SON NHUT AFB, VIETNAM

NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	2.44	907.3	44											1	11	31	1						
20 TO 25	3.91	2330.9	134											4	34	76	14	5	1				
25 TO 30	16.92	7121.4	99											1	4	20	55	8	3				
30 TO 35	36.45	15967.8	89												9	22	47	7	3	1			
ABOVE 35	39.25	17361.0	105												1	32	63	4					
TOTAL	100.97	43696.4	466											2	18	127	272	34	8	5			

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.60	103.7	54																				
1 TO 2	0.55	87.4	53							1	1	7	4	16	17	3	2	1	1				
2 TO 5	1.70	362.2	99							4	4	5	7	14	12	5	1	1					
5 TO 10	1.50	451.5	102							1	2	12	18	44	12	9		1					
10 TO 15	1.72	569.3	32								1	6	33	39	10	9	1	1		1	1		
15 TO 20	0.14	51.6	3								2	12	17			1							
20 TO 25	0.14	53.7	1									2	3	5	3								
25 TO 30	0.21	87.7	18							2	1	2	6	6	13								
30 TO 35	0.45	198.5	15										9	6	1		1						
ABOVE 35	11.44	5249.7	33										12	19	2								
TOTAL	18.69	7215.4	422							1	8	9	36	105	164	62	78	4	4	1	1	1	

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.60	103.7	54						1	1	1	7	4	16	17	3	2	1	1				
1 TO 2	0.55	87.4	53							4	4	5	7	14	12	5	1	1					
2 TO 5	1.70	362.2	99							1	2	12	10	44	12	9		1					
5 TO 10	1.50	451.5	102								1	6	33	39	10	9	1	1			1	1	
10 TO 15	1.72	569.3	32									2	12	17		1							
15 TO 20	2.90	990.9	47								1	6	16	31	1								
20 TO 25	6.05	2302.6	147									6	37	81	17	5	1						
25 TO 30	17.13	7209.1	117							2	2	6	33	61	17	3							
30 TO 35	36.90	16166.4	134									9	31	91	0	4	1						
ABOVE 35	52.69	22610.0	133									1	44	82	6								
TOTAL	119.66	50911.0	600						1	0	11	94	232	436	94	36	9	4	1	1	1		

TABLE D11  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
YOKOTA AB, JAPAN  
AND  
SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	3.61	140.5	2																				
20 TO 25	0.64	239.7	64																				
25 TO 30	0.56	3526.4	14																				
30 TO 35	1.64	4552.4	13																				
ABOVE 35	0.36	4163.3	3																				
TOTAL	29.61	12626.7	98																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.34	52.9	23								1	3	1	7	0	1							
1 TO 2	0.10	29.5	27								1	3	3	0	6	3							
2 TO 5	0.57	136.6	46								1	7	7	16	9	3			1				
5 TO 10	0.52	143.5	77								1	6	26	21	10	9	1	1			1	1	
10 TO 15	0.63	202.4	16									2	7	6		1							
15 TO 20	0.09	33.2	3										2	3	5	3							
20 TO 25	0.09	33.6	13																				
25 TO 30	0.12	52.0	10								2	1	2	6	6	1							
30 TO 35	0.35	136.0	14											0	4	1	1						
ABOVE 35	0.90	461.3	33											12	19	2							
TOTAL	12.75	5399.7	264							1	3	7	25	74	92	30	18	2	2		1	1	

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.34	52.9	23								1	3	1	7	0	1	1						
1 TO 2	0.10	29.5	27							1	3	3	3	6	6	3							
2 TO 5	0.57	106.6	40								1	7	7	16	5	3							
5 TO 10	0.92	143.5	77								1	6	26	21	10	9	1	1			1	1	
10 TO 15	0.63	202.4	16									2	7	6		1							
15 TO 20	0.50	181.5	5										3	3	2								
20 TO 25	0.72	273.3	77										3	16	20	15	5						
25 TO 30	0.69	3570.5	34							2	1	2	0	17	4								
30 TO 35	10.94	4600.0	27									1	11	10	1	3	1						
ABOVE 35	19.26	8770.6	36											14	20	2							
TOTAL	42.56	16626.5	362						1	3	7	27	96	149	51	25	3	2		1	1		



TABLE 2014  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
YOKOTA AB, JAPAN  
AND  
SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS																						
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																		
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30
BELOW 1	0.	0.	0																			
1 TO 2	0.	0.	0																			
2 TO 5	0.	0.	0																			
5 TO 10	0.	0.	0																			
10 TO 15	0.	0.	0																			
15 TO 20	1.22	66.0	20											0	10							
20 TO 25	0.53	211.0	0																			
25 TO 30	0.64	277.6	0																			
30 TO 35	0.20	125.4	0																			
ABOVE 35	12.20	537.5	0											14	40	1						
TOTAL	13.97	666.5	70											22	55	1						

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.30	21.0	14											2	0	3	1						
5 TO 10	0.14	42.0	2																				
10 TO 15	1.17	96.6	2											1	1								
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.44	159.6	16											3	9	3	1						

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	1.23	66.0	0																				
2 TO 5	0.00	21.0	0											2	0	3	1						
5 TO 10	0.10	42.0	0																				
10 TO 15	1.17	96.6	2											1	1								
15 TO 20	0.22	81.0	23											0	15								
20 TO 25	0.53	211.0	0																				
25 TO 30	0.64	277.6	0																				
30 TO 35	0.20	125.4	0																				
ABOVE 35	12.20	537.5	0											14	40	1							
TOTAL	14.44	666.5	64											29	64	4	1						

TABLE 2014  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
YOKOTA AB, JAPAN  
AND  
SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
SUMMER SEASON

NON-Storm CONDITIONS																						
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																		
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30
BELOW 1	0.	0.	0																			
1 TO 2	0.	0.	0																			
2 TO 5	0.	0.	0																			
5 TO 10	0.	0.	0																			
10 TO 15	0.	0.	0																			
15 TO 20	1.33	660.0	10											1								
20 TO 25	0.40	1700.0	40											2	2	43	2			1		
25 TO 30	0.32	2730.7	50											3	14	34	6			1		
30 TO 35	21.94	6000.0	40											7	14	32	6	1				
ABOVE 35	10.23	4954.2	41											1	19	22	3					
TOTAL	44.97	10375.1	245											1	15	64	144	10	1	2		

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																					
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35		
BELOW 1	3.21	32.4	22													1	2	9	6	1	1	1			
1 TO 2	1.20	66.0	21													2	4	6	6			1			
2 TO 5	1.00	60.0	40													1	4	9	10	4	3				
5 TO 10	0.70	60.0	20													1	4	10	4	3					
10 TO 15	0.70	60.0	20													2	7								
15 TO 20	0.	0.	0																						
20 TO 25	0.	0.	0																						
25 TO 30	0.	0.	0																						
30 TO 35	0.	0.	0																						
ABOVE 35	0.	0.	0																						
TOTAL	2.97	741.2	111													3	1	7	21	55	14	4	1	2	1

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	1.21	66.0	0																				
5 TO 10	0.70	60.0	0																				
10 TO 15	0.70	60.0	0																				
15 TO 20	1.34	66.0	10																				
20 TO 25	0.40	170.0	40																				
25 TO 30	0.32	273.7	50																				
30 TO 35	21.95	6000.0	40																				
ABOVE 35	10.23	4954.2	41																				
TOTAL	47.95	8115.9	264																				



[illegible]

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	USE DISTRIBUTION (PT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
0 TO 1	0.00	0.7	0							1													
1 TO 2	0.04	0.5	0							1	1												
2 TO 5	0.12	27.0	4									1			1								
5 TO 10	0.20	56.2	7										3		4								
10 TO 15	0.10	62.1	5										2		3								
15 TO 20	0.03	10.6	0																				
20 TO 25	0.05	20.2	0																				
25 TO 30	0.00	35.7	0																				
30 TO 35	0.15	62.5	1										1										
ABOVE 35	1.54	69.5	0																				
TOTAL	2.67	997.5	31							2	1	4	7	6	3	5	1						

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
0 TO 5	0.00	0.7	5							1		3			3	1								
5 TO 10	0.04	0.3	5							1	1					2	1							
10 TO 15	0.12	27.0	4												1									
15 TO 20	0.20	50.2	7								1			3	4									
20 TO 25	0.10	62.1	5										2	3										
25 TO 30	0.27	90.5	1												1									
30 TO 35	0.30	110.1	2									1	1		1									
35 TO 40	1.49	619.3	25								1	1	10	10	1				2					
40 TO 45	3.73	1059.2	17									1	6	9	1									
ABOVE 45	0.01	1013.5	1										1											
TOTAL	15.29	2547.6	70							2	2	7	24	20	5	5	3							

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																				
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35	
0 TO 1	0.	0.	0																					
1 TO 2	0.	0.	0																					
2 TO 3	0.	0.	0																					
3 TO 10	0.	0.	0																					
10 TO 15	0.	0.	0																					
15 TO 20	0.14	50.5	0																					
20 TO 25	0.10	69.0	1																					
25 TO 30	4.75	1900.0	3											1	1	1								
30 TO 35	4.63	1900.0	1												1									
ABOVE 35		0.	0																					
TOTAL	9.78	6000.1	5											2	2	1								

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WDE DISTRIBUTION (PT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
Below 1	0.06	11.0	13							1													
1 TO 5	0.09	6.3	10							1	2	1	6	1	1								
5 TO 9	0.07	17.1	27							3	9	12	9	3									
9 TO 10	0.12	37.0	33							1	4	11	4	7	4								
10 TO 19	0.17	50.2	4							1													
19 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
Above 35	0.	0.	0																				
TOTAL	3.45	130.2	97						1	3	12	19	24	19	9	1	1						

[illegible]



TABLE D01g  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
YOKOTA AB, JAPAN  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
MONTH OF FEBRUARY

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.14	50.7	1																				
20 TO 25	0.17	60.6	1																				
25 TO 30	0.42	1309.2	3																				
30 TO 35	1.15	400.4	0																				
ABOVE 35	2.70	932.0	2																				
TOTAL	6.00	2029.0	6																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.26	39.4	0																				
1 TO 2	0.12	17.0	0																				
2 TO 5	0.30	60.6	0																				
5 TO 10	0.16	47.3	0																				
10 TO 15	0.35	90.7	0																				
15 TO 20	0.25	17.4	2																				
20 TO 25	0.25	20.4	1																				
25 TO 30	0.07	31.2	11																				
30 TO 35	0.27	121.6	12																				
ABOVE 35	0.62	447.1	11																				
TOTAL	1.20	4501.7	64																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.26	39.4	0							1	1												
1 TO 2	0.12	17.0	0																				
2 TO 5	0.30	60.6	0																				
5 TO 10	0.16	47.3	0																				
10 TO 15	0.35	90.7	0																				
15 TO 20	0.19	60.3	2																				
20 TO 25	0.23	87.0	2																				
25 TO 30	0.30	140.4	14																				
30 TO 35	1.42	612.0	12																				
ABOVE 35	1.71	499.1	13																				
TOTAL	17.26	7430.6	70																				

TABLE D01h  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
YOKOTA AB, JAPAN  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
MONTH OF APRIL

NON-STORM CONDITIONS																							
ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.10	65.5	23																				
20 TO 25	0.37	199.1	0																				
25 TO 30	0.97	240.0	0																				
30 TO 35	0.22	94.7	0																				
ABOVE 35	7.64	3311.9	46																				
TOTAL	9.12	3921.1	69																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.35	7.0	0																				
1 TO 2	0.33	5.4	0																				
2 TO 5	0.40	16.4	14																				
5 TO 10	0.12	35.0	0																				
10 TO 15	0.12	42.4	2																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.30	106.2	16																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.35	7.0	0																				
1 TO 2	0.33	5.4	0																				
2 TO 5	0.40	16.4	14																				
5 TO 10	0.12	35.0	0																				
10 TO 15	0.12	42.4	2																				
15 TO 20	0.10	65.5	23																				
20 TO 25	0.37	199.1	0																				
25 TO 30	0.97	240.0	0																				
30 TO 35	0.22	94.7	0																				
ABOVE 35	7.64	3311.9	46																				
TOTAL	9.50	4627.3	65																				



**DESCRIPTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
YOKOTA AB, JAPAN  
AND  
SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
MONTH OF MAY**

**NON-STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)											
BELOW 1	0.	0.	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5
1 TO 2	0.	0.	0												
2 TO 5	0.	0.	0												
5 TO 10	0.	0.	0												
10 TO 15	0.	0.	0												
15 TO 20	0.04	15.5	0												
20 TO 25	0.03	12.7	0												
25 TO 30	0.07	27.0	0												
30 TO 35	0.07	26.7	0												
ABOVE 35	4.04	2090.5	9												
TOTAL	4.08	2145.2	9											3	6

**STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)											
BELOW 1	0.02	2.5	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5
1 TO 2	0.00	0.9	0												
2 TO 5	0.02	5.2	0												
5 TO 10	0.02	7.8	0												
10 TO 15	0.04	14.3	0												
15 TO 20	0.	0.	0												
20 TO 25	0.	0.	0												
25 TO 30	0.	0.	0												
30 TO 35	0.	0.	0												
ABOVE 35	0.	0.	0												
TOTAL	0.11	30.7	0												

**STORM PLUS NON-STORM**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)											
BELOW 1	0.02	2.5	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5
1 TO 2	0.00	0.9	0												
2 TO 5	0.02	5.2	0												
5 TO 10	0.02	7.8	0												
10 TO 15	0.04	14.3	0												
15 TO 20	0.04	15.5	0												
20 TO 25	0.03	12.7	0												
25 TO 30	0.07	27.0	0												
30 TO 35	0.07	26.7	0												
ABOVE 35	4.04	2090.5	9												
TOTAL	4.06	2173.0	9											3	6

**TABLE D01  
DISTRIBUTION OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
YOKOTA AB, JAPAN  
AND  
SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
MONTH OF JUNE**

**NON-STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)											
BELOW 1	0.	0.	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5
1 TO 2	0.	0.	0												
2 TO 5	0.	0.	0												
5 TO 10	0.	0.	0												
10 TO 15	0.	0.	0												
15 TO 20	0.07	26.4	0												
20 TO 25	0.22	80.6	0												
25 TO 30	5.37	2305.5	57											3	14
30 TO 35	0.	0.	0											3	14
ABOVE 35	0.	0.	0												
TOTAL	5.36	2312.4	57												

**STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)											
BELOW 1	0.03	5.1	5	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5
1 TO 2	0.33	4.4	1												
2 TO 5	0.23	45.0	12												
5 TO 10	0.05	26.3	0												
10 TO 15	0.07	21.0	0												
15 TO 20	0.	0.	0												
20 TO 25	0.	0.	0												
25 TO 30	0.	0.	0												
30 TO 35	0.	0.	0												
ABOVE 35	0.	0.	0												
TOTAL	0.44	102.6	24											6	10

**STORM PLUS NON-STORM**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)											
BELOW 1	0.03	5.1	5	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5
1 TO 2	0.33	4.4	1												
2 TO 5	0.23	45.0	12												
5 TO 10	0.05	26.3	0												
10 TO 15	0.07	21.0	0												
15 TO 20	0.07	26.4	0												
20 TO 25	0.22	80.6	0												
25 TO 30	5.37	2305.5	57											3	14
30 TO 35	0.	0.	0											3	14
ABOVE 35	0.	0.	0												
TOTAL	5.80	2419.0	61												



TABLE D511  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
YOKOTA AB, JAPAN  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
MONTH OF JULY

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.01	0.0	0																				
1 TO 2	0.01	0.0	0																				
2 TO 5	0.01	0.0	0																				
5 TO 10	0.01	0.0	0																				
10 TO 15	0.01	0.0	0																				
15 TO 20	0.03	11.9	0																				
20 TO 25	0.03	24.3	0																				
25 TO 30	0.12	48.9	0																				
30 TO 35	0.08	36.1	0																				
ABOVE 35	1.93	962.2	0																				
TOTAL	2.23	981.4	0																				

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.01	1.3	2																				
1 TO 2	0.01	1.4	4																				
2 TO 5	0.03	8.7	4																				
5 TO 10	0.05	19.0	0																				
10 TO 15	0.03	11.4	0																				
15 TO 20	0.01	0.0	0																				
20 TO 25	0.01	0.0	0																				
25 TO 30	0.01	0.0	0																				
30 TO 35	0.01	0.0	0																				
ABOVE 35	0.01	0.0	0																				
TOTAL	0.13	36.7	10							2	1		4		1		2						

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.01	1.3	2																				
1 TO 2	0.01	1.4	4																				
2 TO 5	0.03	8.7	4																				
5 TO 10	0.05	19.0	0																				
10 TO 15	0.03	11.4	0																				
15 TO 20	0.03	11.9	0																				
20 TO 25	0.03	24.3	0																				
25 TO 30	0.12	48.9	0																				
30 TO 35	0.08	36.1	0																				
ABOVE 35	1.93	962.2	0																				
TOTAL	2.27	1020.1	10							2		1		4		1		2					

TABLE D511  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
YOKOTA AB, JAPAN  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
MONTH OF AUGUST

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.47	501.0	10								1		3	13	1								
20 TO 25	4.21	1684.9	60									2	20	43	2			1					
25 TO 30	1.13	479.3	1																				
30 TO 35	21.06	9699.7	60										7	14	32	4	1						
ABOVE 35	8.30	3696.6	41										1	15	22	3							
TOTAL	36.90	16881.2	180								1	10	52	111	12	1	1						

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	26.3	15										1	1	5	6		1		1			
1 TO 2	0.26	39.5	16										1	4	5	6							
2 TO 5	0.75	192.6	29							1	1	4	5	7	4	3							
5 TO 10	0.60	166.0	12										1	9									
10 TO 15	0.64	214.8	9										2	7									
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	2.43	680.8	77							1	1	6	19	33	14	3	1		1				

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.17	26.3	15									1	1	5	6		1						
1 TO 2	0.26	39.5	16									1	4	5	6					1			
2 TO 5	0.75	192.6	29																				
5 TO 10	0.60	166.0	12							1	1	4	5	7	4	3							
10 TO 15	0.64	214.8	9										3	0									
15 TO 20	1.47	501.0	10										2	7									
20 TO 25	4.21	1684.9	60								1	2	20	13	1								
25 TO 30	1.13	479.3	1												2		1						
30 TO 35	21.06	9699.7	60										7	14	32	4	1						
ABOVE 35	8.30	3696.6	41										1	19	22	3							
TOTAL	36.37	16881.2	265							1	2	16	67	144	20	4	2		1				



TABLE D31a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
YOKOTA AB, JAPAN  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
MONTH OF OCTOBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.17	59.8	0																				
20 TO 25	0.17	64.9	0																				
25 TO 30	0.25	103.0	1																				
30 TO 35	3.46	1543.2	13									1	4	7	1								
ABOVE 35	4.33	1793.2	1										1	4	7	1							
TOTAL	0.07	3564.1	15									1	6	7	1								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.36	0.2	5							1			1				1						
1 TO 2	0.02	4.1	5							1	1												
2 TO 5	0.10	23.0	4									1			1								
5 TO 10	0.16	44.8	7										3	4									
10 TO 15	0.14	47.9	5												2	3							
15 TO 20	0.25	10.6	0																				
20 TO 25	0.09	20.2	0																				
25 TO 30	0.30	35.7	0																				
30 TO 35	0.15	62.5	1																				
ABOVE 35	1.54	639.5	0											1									
TOTAL	2.36	904.5	31							2	1	4	7	8	3	5	1						

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.36	0.2	9																				
1 TO 2	0.32	4.1	5																				
2 TO 5	0.10	23.0	4																				
5 TO 10	0.16	44.8	7																				
10 TO 15	0.14	47.9	5																				
15 TO 20	0.22	70.4	0																				
20 TO 25	0.22	85.3	0																				
25 TO 30	0.33	130.6	1																				
30 TO 35	3.00	1605.8	14																				
ABOVE 35	5.57	2432.7	1																				
TOTAL	10.43	4460.6	46																				

TABLE D31a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
YOKOTA AB, JAPAN  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
MONTH OF NOVEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.05	10.0	1																				
20 TO 25	0.30	35.0	2																				
25 TO 30	1.15	400.7	24																				
30 TO 35	0.12	53.4	3																				
ABOVE 35	3.34	1400.9	0																				
TOTAL	4.74	2044.0	30																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.01	2.2	0																				
2 TO 5	0.02	4.0	0																				
5 TO 10	0.04	11.4	0																				
10 TO 15	0.04	14.2	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.12	33.1	0																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.01	2.2	0																				
2 TO 5	0.02	4.0	0																				
5 TO 10	0.04	11.4	0																				
10 TO 15	0.04	14.2	0																				
15 TO 20	0.05	10.0	1																				
20 TO 25	0.00	35.0	2																				
25 TO 30	1.15	400.7	24																				
30 TO 35	0.12	53.4	3																				
ABOVE 35	3.34	1400.9	0																				
TOTAL	4.86	2099.0	30																				



TABLE D310  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
YOKOTA AB, JAPAN  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
MONTH OF DECEMBER  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.13	47.3	2																				
20 TO 25	0.20	103.2	62											1	12	32	12	5					
25 TO 30	0.30	150.4	10											3	7								
30 TO 35	4.00	2132.0	12											1	3	5		2	1				
ABOVE 35	7.27	3200.3	1																				
TOTAL	12.93	5649.9	87											2	19	46	12	7	1				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	2.5	1																				
1 TO 2	0.04	5.4	14																				
2 TO 5	0.12	20.9	10																				
5 TO 10	0.24	50.6	35																				
10 TO 15	0.17	55.4	9																				
15 TO 20	0.04	15.4	1																				
20 TO 25	0.03	13.2	12																				
25 TO 30	0.05	23.8	7																				
30 TO 35	0.05	14.4	2																				
ABOVE 35	1.20	543.2	22																				
TOTAL	2.01	767.9	113																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	2.5	1																				
1 TO 2	0.04	5.4	14																				
2 TO 5	0.12	20.9	10																				
5 TO 10	0.24	50.6	35																				
10 TO 15	0.17	55.4	9																				
15 TO 20	0.17	62.7	3																				
20 TO 25	0.32	116.4	74																				
25 TO 30	0.43	179.3	17																				
30 TO 35	4.00	2167.0	14																				
ABOVE 35	0.05	3771.3	23																				
TOTAL	14.05	6417.7	290																				



TABLE D01  
DISTRIBUTIONS OF DERIVED VERTICAL WIND VELOCITY  
FOR THE ROUTE BETWEEN  
KAGURA AB, OKINAWA  
AND  
SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	0.0	0																				
1 TO 2	0.17	0.0	0																				
2 TO 5	0.79	0.0	0																				
5 TO 10	0.36	0.0	0																				
10 TO 15	0.30	0.0	0																				
15 TO 20	1.42	593.6	31																				
20 TO 25	1.02	507.9	10																				
25 TO 30	4.20	1739.2	1																				
30 TO 35	0.53	4256.7	23																				
ABOVE 35	3.15	1423.3	1																				
TOTAL	10.22	8942.3	66																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	30.0	0																				
1 TO 2	0.17	31.0	0																				
2 TO 5	0.79	170.6	0																				
5 TO 10	0.36	110.1	0																				
10 TO 15	0.30	171.6	0																				
15 TO 20	0.06	15.4	0																				
20 TO 25	0.06	23.2	0																				
25 TO 30	0.00	1.4	0																				
30 TO 35	0.00	0.0	0																				
ABOVE 35	0.00	0.0	0																				
TOTAL	2.11	942.1	175																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.10	30.0	0																				
1 TO 2	0.17	31.0	0																				
2 TO 5	0.79	170.6	29					1															
5 TO 10	0.36	110.1	19							1													
10 TO 15	0.30	171.6	61							1	2	1	4	10									
15 TO 20	1.42	949.0	31							1	3	1	10	23	0	2	2	1					
20 TO 25	1.02	410.7	10										3	5	15	3	3						
25 TO 30	4.20	1700.6	1											0	1	1							
30 TO 35	0.53	4256.7	23																				
ABOVE 35	3.15	1423.3	1												1	16	4						
TOTAL	21.32	8942.3	241						1	2	4	5	22	45	85	40	20	10	4	1			

TABLE D02  
DISTRIBUTIONS OF DERIVED VERTICAL WIND VELOCITY  
FOR THE ROUTE BETWEEN  
KAGURA AB, OKINAWA  
AND  
SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
WINTER SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.15	50.0	0																				
20 TO 25	0.15	55.2	1																				
25 TO 30	3.07	1500.1	1											1	1								
30 TO 35	3.39	1546.2	0																				
ABOVE 35	0.	0.	0																				
TOTAL	7.95	3296.9	2											1	1								

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	19.0	16							1			3	5	3	1							
1 TO 2	0.00	10.0	13										5	1	7		1	1					
2 TO 5	0.27	63.2	3										2	1									
5 TO 10	0.17	51.0	11										3	0									
10 TO 15	0.20	97.6	55																				
15 TO 20	0.04	15.4	0							1	3	1	10	9	20	6	2	2	1				
20 TO 25	0.00	23.2	0																				
25 TO 30	0.00	1.4	0																				
30 TO 35	0.00	0.0	0																				
ABOVE 35	0.00	0.0	0																				
TOTAL	1.04	200.6	100							1	4	1	13	23	33	16	3	4	2				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.11	19.0	10							1			3	3	3	1							
1 TO 2	0.09	10.0	15										2	1	7		1	1					
2 TO 5	0.27	65.2	3										2	1									
5 TO 10	0.17	51.0	11										3	0									
10 TO 15	0.29	97.0	50										3	1									
15 TO 20	0.19	75.0	0																				
20 TO 25	0.19	75.0	1																				
25 TO 30	3.07	1590.1	1																				
30 TO 35	3.39	1546.2	0																				
ABOVE 35	0.00	0.0	0																				
TOTAL	6.90	3047.1	102							1	4	1	10	24	34	10	3	4	2				



TABLE D024  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KADENA AB, OKINAWA  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS																						
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																		
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30
BELOW 1	0.	0.	0																			
1 TO 2	0.	0.	0																			
2 TO 5	0.	3.	0																			
5 TO 10	0.	0.	0																			
10 TO 15	0.	3.	0																			
15 TO 20	0.07	24.5	0																			
20 TO 25	0.10	43.6	0																			
25 TO 30	0.10	44.6	0																			
30 TO 35	0.46	207.9	0																			
ABOVE 35	1.15	1425.3	1																			
TOTAL	3.00	1742.7	1																			

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.01	1.2	0																				
1 TO 2	0.02	3.0	0																				
2 TO 5	0.10	36.7	0																				
5 TO 10	0.07	21.0	0																				
10 TO 15	0.07	23.0	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.35	85.6	0																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.01	1.2	0																				
1 TO 2	0.02	3.0	0																				
2 TO 5	0.10	36.7	0																				
5 TO 10	0.07	21.0	0																				
10 TO 15	0.07	23.0	0																				
15 TO 20	0.07	24.5	0																				
20 TO 25	0.10	43.6	0																				
25 TO 30	0.10	44.6	0																				
30 TO 35	0.46	207.9	0																				
ABOVE 35	1.15	1425.3	1																				
TOTAL	2.25	1628.3	1																				

TABLE D024  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KADENA AB, OKINAWA  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
SUMMER SEASON

NON-STORM CONDITIONS																						
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																		
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30
BELOW 1	0.	0.	0																			
1 TO 2	0.	0.	0																			
2 TO 5	0.	0.	0																			
5 TO 10	0.	0.	0																			
10 TO 15	0.	0.	0																			
15 TO 20	1.16	951.1	31																			
20 TO 25	0.73	293.7	9																			
25 TO 30	0.22	99.0	0																			
30 TO 35	5.67	2502.3	23																			
ABOVE 35	0.	0.	0																			
TOTAL	7.79	3343.1	63																			

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	9.3	2																				
1 TO 2	0.08	9.2	15																				
2 TO 5	0.33	78.7	26																				
5 TO 10	0.12	30.1	8																				
10 TO 15	0.15	31.3	6																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.72	166.0	75																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.05	9.0	20																				
1 TO 2	0.08	9.2	15																				
2 TO 5	0.33	78.7	26																				
5 TO 10	0.12	30.1	8																				
10 TO 15	0.15	31.0	6																				
15 TO 20	1.16	951.1	31																				
20 TO 25	0.73	293.7	9																				
25 TO 30	0.22	99.0	0																				
30 TO 35	5.67	2502.3	23																				
ABOVE 35	0.	0.	0																				
TOTAL	8.90	3529.0	130																				



### NON-STORM CONDITIONS

### STORM CONDITIONS

STORM PLUS M300-STORM

NOTES - SIGN COMPILATIONS

### STORM CONDITIONS

SYSTEM PLUS MOD-SYSTEM451



TABLE D2a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KADENA AB, OKINAWA  
AND

SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
MONTH OF MARCH

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.01	0.0	0													
1 TO 2	0.01	0.0	0													
2 TO 5	0.01	0.0	0													
5 TO 10	0.01	0.0	0													
10 TO 15	0.01	0.0	0													
15 TO 20	0.07	26.5	0													
20 TO 25	0.10	43.6	0													
25 TO 30	0.10	44.6	0													
30 TO 35	0.44	207.9	0													
ABOVE 35	3.15	1425.3	1													
TOTAL	3.88	1742.7	1													

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.01	1.2	0													
1 TO 2	0.02	1.0	0													
2 TO 5	0.10	36.7	0													
5 TO 10	0.07	21.0	0													
10 TO 15	0.07	23.0	0													
15 TO 20	0.0	0.0	0													
20 TO 25	0.0	0.0	0													
25 TO 30	0.0	0.0	0													
30 TO 35	0.0	0.0	0													
ABOVE 35	0.0	0.0	0													
TOTAL	0.20	60.9	0													

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.01	1.2	0													
1 TO 2	0.02	1.0	0													
2 TO 5	0.10	36.7	0													
5 TO 10	0.07	21.0	0													
10 TO 15	0.07	23.0	0													
15 TO 20	0.07	26.5	0													
20 TO 25	0.10	43.6	0													
25 TO 30	0.10	44.6	0													
30 TO 35	0.44	207.9	0													
ABOVE 35	3.15	1425.3	1													
TOTAL	4.23	1626.3	1													

TABLE D2b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KADENA AB, OKINAWA  
AND

SAIGON, TAN SON NHUT AFB, VIETNAM  
FOR THE  
MONTH OF JUNE

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.0	0.0	0													
1 TO 2	0.0	0.0	0													
2 TO 5	0.0	0.0	0													
5 TO 10	0.0	0.0	0													
10 TO 15	0.0	0.0	0													
15 TO 20	0.07	27.4	0													
20 TO 25	0.12	45.6	0													
25 TO 30	0.10	47.1	0													
30 TO 35	3.13	1394.0	20													
ABOVE 35	0.0	0.0	0													
TOTAL	3.40	1466.6	20													

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.03	6.0	12													
1 TO 2	0.03	5.1	0													
2 TO 5	0.20	45.2	2													
5 TO 10	0.30	10.1	0													
10 TO 15	0.07	22.6	0													
15 TO 20	0.0	0.0	0													
20 TO 25	0.0	0.0	0													
25 TO 30	0.0	0.0	0													
30 TO 35	0.0	0.0	0													
ABOVE 35	0.0	0.0	0													
TOTAL	0.50	97.0	22													

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)												
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10
BELOW 1	0.03	6.0	12													
1 TO 2	0.03	5.1	0													
2 TO 5	0.20	45.2	2													
5 TO 10	0.30	10.1	0													
10 TO 15	0.07	22.6	0													
15 TO 20	0.07	27.4	0													
20 TO 25	0.12	45.6	0													
25 TO 30	0.10	47.1	0													
30 TO 35	3.13	1394.0	20													
ABOVE 35	0.0	0.0	0													
TOTAL	3.87	1591.0	42													



TABLE DSM  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
KADUNA AB, OKINAWA  
AND  
SAIGON, TAN SON NHUT A/D, VIETNAM  
FOR THE  
MONTH OF JULY

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (KT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
0 TO 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	1.09	423.7	31						1				3	3	15	3	3			1			
20 TO 25	0.61	240.1	9												7	1	1						
25 TO 30	0.37	20.7	2																				
30 TO 35	2.54	1147.7	3																				
ABOVE 35	0.	0.	0												3								
TOTAL	4.30	1940.2	43						1				3	3	25	4	4			1			

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (KT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
0 TO 1	0.07	3.0	0																				
1 TO 2	0.02	4.0	7																				
2 TO 5	0.13	33.0	24																				
5 TO 10	0.07	20.0	0																				
10 TO 15	0.40	20.4	6																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.62	99.0	33																				

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (KT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
0 TO 1	0.07	3.0	0																				
1 TO 2	0.02	4.0	7																				
2 TO 5	0.13	33.0	24																				
5 TO 10	0.07	20.0	0																				
10 TO 15	0.00	20.4	6																				
15 TO 20	1.09	423.7	31																				
20 TO 25	0.61	240.1	9																				
25 TO 30	0.07	20.7	0																				
30 TO 35	2.54	1147.7	3																				
ABOVE 35	0.	0.	0																				
TOTAL	4.63	1937.2	76																				



TABLE D33a  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TORREJON DE ARDOZ AB, SPAIN  
AND  
DHAMRAN A/D, SAUDI ARABIA

NON-STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																							
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35				
BELOW 1	0.32	3.2	0																								
1 TO 2	0.32	3.2	0																								
2 TO 5	0.32	3.2	0																								
5 TO 10	0.32	3.2	0																								
10 TO 15	0.32	3.2	0																								
15 TO 20	0.32	3.2	16																								
20 TO 25	0.32	3.2	7																								
25 TO 30	0.32	3.2	0																								
30 TO 35	0.32	3.2	0																								
ABOVE 35	0.32	3.2	0																								
TOTAL	2.24	22.4	167																								

STORM CONDITIONS

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.32	3.2	0																				
1 TO 2	0.32	3.2	1										1										
2 TO 5	0.32	3.2	27										2	13	13	1	1						
5 TO 10	0.32	3.2	9										1	1	5	2							
10 TO 15	0.32	3.2	27					1	1				9	9	8	4	2	1					
15 TO 20	0.32	3.2	0																				
20 TO 25	0.32	3.2	0																				
25 TO 30	0.32	3.2	0																				
30 TO 35	0.32	3.2	0																				
ABOVE 35	0.32	3.2	0																				
TOTAL	1.12	11.2	64					1	1			8	17	26	7	5	1						

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																							
(1000 FT.)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35				
BELOW 1	0.32	3.2	0																								
1 TO 2	0.32	3.2	1																								
2 TO 5	0.36	3.6	27																								
5 TO 10	0.42	4.2	9																								
10 TO 15	0.20	2.0	27																								
15 TO 20	0.32	3.2	16																								
20 TO 25	0.33	3.3	7																								
25 TO 30	0.33	3.3	0																								
30 TO 35	0.33	3.3	0																								
ABOVE 35	0.74	7.4	0																								
TOTAL	21.24	212.4	111																								

TABLE D33b  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TORREJON DE ARDOZ AB, SPAIN  
AND  
DHAMRAN A/D, SAUDI ARABIA  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.32	3.2	0																				
1 TO 2	0.32	3.2	0																				
2 TO 5	0.32	3.2	0																				
5 TO 10	0.32	3.2	0																				
10 TO 15	0.32	3.2	0																				
15 TO 20	0.32	3.2	0																				
20 TO 25	0.32	3.2	0																				
25 TO 30	0.32	3.2	0																				
30 TO 35	0.32	3.2	0																				
ABOVE 35	0.32	3.2	0																				
TOTAL	0.96	9.6	0																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.32	3.2	0																				
1 TO 2	0.32	3.2	1																				
2 TO 5	0.39	38.8	2										1	1									
5 TO 10	0.15	46.3	7												4	2							
10 TO 15	0.16	46.8	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.97	144.4	10										2	2	4	2							

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.32	3.2	0																				
1 TO 2	0.32	3.2	1																				
2 TO 5	0.16	16.0	2									1	1										
5 TO 10	0.16	40.0	7												6	2							
10 TO 15	0.16	40.0	0																				
15 TO 20	0.16	32.0	0																				
20 TO 25	0.16	32.0	0																				
25 TO 30	0.16	63.1	0																				
30 TO 35	0.09	4191.0	111																				
ABOVE 35	0.	3.	0								3	16	100	156	27	2	1						
TOTAL	16.91	4476.1	121								2	16	110	160	29	2	1						



**TABLE D333**  
**DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY**  
**FOR THE ROUTE BETWEEN**  
**TORREJON DE ARDOZ AB, SPAIN**  
**AND**  
**QAHMAN A/D, SAUDI ARABIA**  
**FOR THE**  
**SUMMER SEASON**

**NON-STORM CONDITIONS**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.17	61.0	16																				
20 TO 25	0.10	72.5	7																				
25 TO 30	0.10	77.5	0																				
30 TO 35	4.03	2196.9	13																				
ABOVE 35	4.74	2023.0	0																				
TOTAL	10.11	4572.1	36																				

**STORM CONDITIONS**

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.04	6.0	0																				
2 TO 5	0.17	34.1	25																				
5 TO 10	0.26	73.2	2																				
10 TO 15	0.14	49.1	27																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.62	162.9	34																				

**STORM PLUS NON-STORM**

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.04	6.0	0																				
2 TO 5	0.17	34.1	25																				
5 TO 10	0.26	73.2	2																				
10 TO 15	0.14	49.1	27																				
15 TO 20	0.17	61.0	16																				
20 TO 25	0.10	72.5	7																				
25 TO 30	0.10	77.5	0																				
30 TO 35	4.03	2196.9	13																				
ABOVE 35	4.74	2023.0	0																				
TOTAL	10.73	4599.0	90																				

**TABLE D334**  
**DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY**  
**FOR THE ROUTE BETWEEN**  
**TORREJON DE ARDOZ AB, SPAIN**  
**AND**  
**QAHMAN A/D, SAUDI ARABIA**  
**FOR THE**  
**MONTH OF APRIL**

**NON-STORM CONDITIONS**

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.10	36.0	0																				
20 TO 25	0.10	39.7	0																				
25 TO 30	0.10	42.0	0																				
30 TO 35	5.92	2410.1	135										9	97	66	7							
ABOVE 35	0.	0.	0																				
TOTAL	5.02	2520.1	135										9	97	66	7							

**STORM CONDITIONS**

				GUST DISTRIBUTION (FT./SEC.)																			
ALTITUDE	TIME	NAUTICAL	TOTAL	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
(1000 FT.)	(HOURS)	MILES	PEAKS																				
BELOW 1	0.02	3.2	0																				
1 TO 2	0.05	6.3	1																				
2 TO 5	0.15	31.0	0																				
5 TO 10	0.13	35.3	0																				
10 TO 15	0.10	32.4	0																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.45	110.2	1																				

**STORM PLUS NON-STORM**

ALTITUDE	TIME	NAUTICAL	TOTAL	GUST DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	3.2	0																				
1 TO 2	0.05	6.3	1																				
2 TO 5	0.15	31.0	0																				
5 TO 10	0.13	35.3	0																				
10 TO 15	0.10	32.4	0																				
15 TO 20	0.10	36.0	0																				
20 TO 25	0.10	39.7	0																				
25 TO 30	0.10	42.0	0																				
30 TO 35	5.92	2410.1	135																				
ABOVE 35	0.	0.	0																				
TOTAL	6.27	2600.7	136																				



TABLE D136  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TORREJON DE ARDOZ AB, SPAIN  
AND  
DHAHRAN A/D, SAUDI ARABIA  
FOR THE  
MONTH OF MAY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0	0	0																				
1 TO 2	0	0	0																				
2 TO 5	0	0	0																				
5 TO 10	0	0	0																				
10 TO 15	0	0	0																				
15 TO 20	0.05	10.0	0																				
20 TO 25	0.05	10.0	0																				
25 TO 30	0.05	10.0	0																				
30 TO 35	0.05	1001.0	170																				
ABOVE 35	0	0	0																				
TOTAL	0.15	1001.2	170											1	9	91	90	20	2	1			

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0	0	0																				
1 TO 2	0	0	0																				
2 TO 5	0.05	10.0	0																				
5 TO 10	0.05	10.0	0																				
10 TO 15	0.05	10.0	0																				
15 TO 20	0	0	0																				
20 TO 25	0	0	0																				
25 TO 30	0	0	0																				
30 TO 35	0	0	0																				
ABOVE 35	0	0	0																				
TOTAL	0.12	30.0	0											2	1	4	2						

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0	0	0																				
1 TO 2	0.01	0.01	1.2																				
2 TO 5	0.05	0.05	7.0										1	1									
5 TO 10	0.05	0.05	10.0												6	2							
10 TO 15	0.06	0.06	10.0																				
15 TO 20	0.05	0.05	10.0																				
20 TO 25	0.05	0.05	10.0																				
25 TO 30	0.05	0.05	10.0																				
30 TO 35	0.08	0.08	170																				
ABOVE 35	0	0	0																				
TOTAL	0.24	0.24	100										1	11	92	94	22	2	1				

TABLE D137  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
TORREJON DE ARDOZ AB, SPAIN  
AND  
DHAHRAN A/D, SAUDI ARABIA  
FOR THE  
MONTH OF JULY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.17	61.0	10											1	2	2	9	2					
20 TO 25	0.10	32.9	7											1	1	1	2	1					
25 TO 30	0.10	33.0	7																				
30 TO 35	0.03	2100.0	13																				
ABOVE 35	0.04	2020.0	3																				
TOTAL	0.33	4372.1	30											1	3	14	19	5					

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	WIND DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0	0.0	0																				
1 TO 2	0.04	0.0	0																				
2 TO 5	0.17	30.1	25										1	0	1.5	1	1						
5 TO 10	0.20	73.2	2												1	1							
10 TO 15	0.10	40.1	27																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	0.62	102.0	34											1	1	6	15	22	5	5	1		

STORM PLUS NON-STORM

ALTITUDE	TIME	NAUTICAL	TOTAL	WIND DISTRIBUTION (FT./SEC.)																			
(1000 FT)	(HOURS)	MILES	PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0	0	0																				
1 TO 2	0.04	0.0	0																				
2 TO 5	0.17	30.1	25									1	0	1	0	1							
5 TO 10	0.20	73.2	2										1	1	1								
10 TO 15	0.10	40.1	27										0	0	0	2	2	1					
15 TO 20	0.17	61.0	10							1		0	0	0	2								
20 TO 25	0.10	33.0	7								1	0	2	1									
25 TO 30	0.10	33.0	7																				
30 TO 35	0.03	2100.0	13											0	0								
ABOVE 35	0.03	2020.0	0																				
TOTAL	0.79	4355.0	90				1		1	1	0	20	37	0	0	1							



TABLE D344  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DON MUANG A/D, BANGKOK, THAILAND  
AND  
NEW DELHI/PALAM A/D, INDIA

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.0	0																				
5 TO 10	0.00	0.0	0																				
10 TO 15	0.00	0.0	0																				
15 TO 20	0.44	168.6	1																				
20 TO 25	0.53	210.9	0																				
25 TO 30	0.59	240.7	0																				
30 TO 35	7.05	3515.4	108				1			2	5	7	33	56	5	2			1				
ABOVE 35	9.34	4292.1	95							1	1	9	29	56	5								
TOTAL	10.57	8236.7	234				1			3	4	12	62	109	12	2			1				

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	-35	-30	-25	-20	-17.5	-15	-12.5	GUST DISTRIBUTION (FT./SEC.)												
											-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0								1					3	1						
1 TO 2	0.20	62.9	65							2	1	6	16	9	17	10	5	1	1	1			
2 TO 5	0.72	156.0	158							2	6	10	32	55	26	13	6	2	2		1		
5 TO 10	0.56	177.7	30						1			1	7	11	7	1	1	1					
10 TO 15	0.60	201.5	12								1		3	8									
15 TO 20	0.64	15.1	0																				
20 TO 25	0.34	16.6	0																				
25 TO 30	0.33	14.3	0																				
30 TO 35	0.80	367.8	0																				
ABOVE 35	1.39	676.2	0																				
TOTAL	4.23	1450.7	270						1	5	9	23	56	83	94	27	11	6	3	1			

STORM PLUS NON-STORM																						
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																		
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30
BELOW 1	0.00	0.0	5								1					1						
1 TO 2	0.22	60.9	65							2	1	6	16	9	17	10	1	1	1	1		
2 TO 5	0.72	156.0	158							2	6	10	32	55	24	13	6	7	2		1	
5 TO 10	0.54	177.7	30					1			1	7	11	7	1	1	1					
10 TO 15	0.60	201.5	12							1		1	0									
15 TO 20	0.64	15.1	0										0									
20 TO 25	0.34	16.6	0																			
25 TO 30	0.33	14.3	0																			
30 TO 35	0.80	367.8	0																			
ABOVE 35	1.39	676.2	0					1		2	5	7	33	56	5	2			1			
TOTAL	22.40	9587.3	474					1		1	7	15	55	119	92	39	2		11	5	1	1

TABLE D345  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DON MUANG A/D, BANGKOK, THAILAND  
AND  
NEW DELHI/PALAM A/D, INDIA  
FOR THE  
SPRING SEASON

NON-STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.00	0.0	0																				
1 TO 2	0.00	0.0	0																				
2 TO 5	0.00	0.0	0																				
5 TO 10	0.00	0.0	0																				
10 TO 15	0.00	0.0	0																				
15 TO 20	0.12	45.8	0																				
20 TO 25	0.12	44.5	0																				
25 TO 30	0.14	57.7	0																				
30 TO 35	0.24	103.1	1																				
ABOVE 35	0.07	172.2	5																				
TOTAL	0.66	227.2	6											1	2	1	2						

STORM CONDITIONS																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.21	2.0	0																				
1 TO 2	0.15	21.7	15							1			6	7	6	9	5	3	1	1			
2 TO 5	0.27	60.2	70							1	2	6	17	27	5	7	2	1	2				
5 TO 10	0.22	65.1	17						1			1	4	4	4	1	1	1					
10 TO 15	0.15	50.9	0																				
15 TO 20	0.14	15.3	0																				
20 TO 25	0.04	16.6	0																				
25 TO 30	0.03	14.3	0																				
30 TO 35	0.02	347.6	0																				
ABOVE 35	1.39	676.2	0																				
TOTAL	2.60	1000.0	122						1	2	2	11	28	37	10	11	6	3	3				

STORM PLUS NON-STORM																							
ALTITUDE (1000 FT.)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)																			
BELOW 1	0.21	2.0	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
1 TO 2	0.15	21.7	15							1		4	7	6	9	5	3	1	1				
2 TO 5	0.27	60.2	70							1	2	6	17	27	5	7	2	1	2				
5 TO 10	0.22	65.1	17						1			1	4	4	4	1	1	1					
10 TO 15	0.15	50.9	0																				
15 TO 20	0.17	61.2	0																				
20 TO 25	0.16	65.1	0																				
25 TO 30	0.17	72.0	0																				
30 TO 35	1.34	452.0	1											1									
ABOVE 35	0.11	2266.3	5												2	2							
TOTAL	7.45	5095.3	120						1	2	2	12	20	38	20	11	6	3	3				



### NON-STEAM CONDITIONS

### STORM CONDITIONS

**STOCK PLUS MONTHLY**

### NON-STORM CONDITIONS

### STORM CONDITIONS

**STORM PLUS MINI-STORM**458



TABLE D343  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DON MUANG A/D, BANGKOK, THAILAND  
AND  
NEW DELHI/PALAM A/D, INDIA  
FOR THE  
MONTH OF MAY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.04	14.0	0																				
20 TO 25	0.04	17.0	0																				
25 TO 30	0.05	21.5	0																				
30 TO 35	0.10	42.4	0																				
ABOVE 35	1.20	561.5	0																				
TOTAL	1.91	637.3	0																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.01	2.0	0																				
1 TO 2	0.05	8.1	7																				
2 TO 5	0.17	39.3	53																				
5 TO 10	0.12	37.2	9																				
10 TO 15	0.08	27.9	0																				
15 TO 20	0.04	15.3	0																				
20 TO 25	0.04	16.4	0																				
25 TO 30	0.03	14.3	0																				
30 TO 35	0.60	47.6	0																				
ABOVE 35	1.09	474.2	0																				
TOTAL	2.45	902.6	69																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.31	2.0	0																				
1 TO 2	0.05	8.1	7																				
2 TO 5	0.17	39.3	53																				
5 TO 10	0.12	37.2	9																				
10 TO 15	0.08	27.9	0																				
15 TO 20	0.04	15.3	0																				
20 TO 25	0.04	16.4	0																				
25 TO 30	0.03	14.3	0																				
30 TO 35	0.60	47.6	0																				
ABOVE 35	1.09	474.2	0																				
TOTAL	2.72	1039.9	69																				

TABLE D344  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DON MUANG A/D, BANGKOK, THAILAND  
AND  
NEW DELHI/PALAM A/D, INDIA  
FOR THE  
MONTH OF JULY  
NON-STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.	0.	0																				
1 TO 2	0.	0.	0																				
2 TO 5	0.	0.	0																				
5 TO 10	0.	0.	0																				
10 TO 15	0.	0.	0																				
15 TO 20	0.25	92.4	0																				
20 TO 25	0.30	119.4	0																				
25 TO 30	0.32	174.4	0																				
30 TO 35	4.68	2069.6	33																				
ABOVE 35	5.02	2320.0	90																				
TOTAL	10.97	4757.1	123																				

STORM CONDITIONS

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.37	2.9	5																				
1 TO 2	0.10	15.0	21																				
2 TO 5	0.39	60.3	71																				
5 TO 10	0.29	90.0	13																				
10 TO 15	0.20	96.0	12																				
15 TO 20	0.	0.	0																				
20 TO 25	0.	0.	0																				
25 TO 30	0.	0.	0																				
30 TO 35	0.	0.	0																				
ABOVE 35	0.	0.	0																				
TOTAL	1.00	285.0	122																				

STORM PLUS NON-STORM

ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	UDE DISTRIBUTION (FT./SEC.)																			
				-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15	+17.5	+20	+25	+30	+35
BELOW 1	0.02	2.9	5																				
1 TO 2	0.10	15.0	21																				
2 TO 5	0.39	60.3	71																				
5 TO 10	0.29	90.0	13																				
10 TO 15	0.20	96.0	12																				
15 TO 20	0.25	92.4	0																				
20 TO 25	0.30	119.4	0																				
25 TO 30	0.32	174.4	0																				
30 TO 35	4.68	2069.6	33																				
ABOVE 35	5.02	2320.0	90																				
TOTAL	11.66	3042.1	245																				



TABLE D94  
DISTRIBUTIONS OF DERIVED VERTICAL GUST VELOCITY  
FOR THE ROUTE BETWEEN  
DON MUANG A/D, BANGKOK, THAILAND  
AND  
NEW DELHI/PALAM A/D, INDIA  
FOR THE  
MONTH OF AUGUST

				NON-STORM CONDITIONS														
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)														
BELOW 1	0.	0.	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15
1 TO 2	0.	0.	0															
2 TO 5	0.	0.	0															
5 TO 10	0.	0.	0															
10 TO 15	0.	0.	0															
15 TO 20	0.00	30.4	1															
20 TO 25	0.11	42.0	0															
25 TO 30	0.13	56.4	0															
30 TO 35	3.02	1322.7	74				1			2	3	7	25	30	4	1		1
ABOVE 35	0.	0.	0															
TOTAL	3.15	1492.5	75				1			2	3	7	25	31	4	1		1

				STORM CONDITIONS														
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)														
BELOW 1	0.01	1.5	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15
1 TO 2	0.03	4.2	9															
2 TO 5	0.07	15.5	17															
5 TO 10	0.07	22.6	0															
10 TO 15	0.17	53.7	0															
15 TO 20	0.	0.	0															
20 TO 25	0.	0.	0															
25 TO 30	0.	0.	0															
30 TO 35	0.	0.	0															
ABOVE 35	0.	0.	0															
TOTAL	0.35	97.6	26											2	2	4	7	4

				STORM PLUS NON-STORM														
ALTITUDE (1000 FT)	TIME (HOURS)	NAUTICAL MILES	TOTAL PEAKS	GUST DISTRIBUTION (FT./SEC.)														
BELOW 1	0.01	1.5	0	-35	-30	-25	-20	-17.5	-15	-12.5	-10	-7.5	-5	+5	+7.5	+10	+12.5	+15
1 TO 2	0.03	4.2	9															
2 TO 5	0.07	15.5	17															
5 TO 10	0.07	22.6	0															
10 TO 15	0.17	53.7	0															
15 TO 20	0.00	30.4	1															
20 TO 25	0.11	42.0	0															
25 TO 30	0.13	56.4	0															
30 TO 35	3.02	1322.7	74				1			2	3	7	25	30	4	1		1
ABOVE 35	0.	0.	0															
TOTAL	3.70	1549.0	101				1			2	5	9	29	38	11	5		1



## REFERENCES

1. Militello, J. ; Instrumentation of the C-141 Aircraft for Load Experience and Turbulence Studies; University of Dayton Research Institute Technical Report No. 66-114; October 1966.
2. Blount, E. E. ; C-141A Fatigue Criteria and Spectra, Volume I, Fatigue Criteria; Lockheed Aircraft Corporation Report No. ER-5007; 10 January 1962 as revised 14 October 1964.
3. Pratt, K. G. and Walker, W. G. ; A Revised Gust-Load Formula and a Re-evaluation of V-G Data Taken on Civil Transport Airplanes from 1933 to 1950; NACA Report 1206; 1954.
4. Military Specification; MIL-A-8861 (ASG); 18 May 1960.
5. C-141 Aircraft Flight Loads Data Program, 6000-Hour Periodic Data Report, Lead-the-Force Data; University of Dayton Research Institute; 16 November 1966.
6. C-141 Aircraft Flight Loads Data Program, 175-Hour Periodic Data Report, Ground Loads Study Data; University of Dayton Research Institute; 17 November 1966.
7. C-141 Aircraft Flight Loads Data Program, 6000-Hour Periodic Data Report, Volume I, Interim Flight Loads Data, and Volume II, Turbulence Study Composite; University of Dayton Research Institute, 9 December 1966.



**UNCLASSIFIED**

Security Classification

DOCUMENT CONTROL DATA - R&D		
(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)		
1 ORIGINATING ACTIVITY (Corporate author)		2a REPORT SECURITY CLASSIFICATION
University of Dayton Research Institute Dayton, Ohio		Unclassified
		2b GROUP N/A
3 REPORT TITLE		
Structural Loads Data from C-141A Aircraft		
4 DESCRIPTIVE NOTES (Type of report and inclusive dates)		
Final Report July 65-December 66		
5 AUTHOR(S) (Last name, first name, initial)		
Schwartz, Robert B.		
6 REPORT DATE	7a TOTAL NO OF PAGES	7b NO OF REFS
April 1967	492	7
8a CONTRACT OR GRANT NO.	9a ORIGINATOR'S REPORT NUMBER(S)	
AF 33(657)-14424	N/A	
b. PROJECT NO.	9b OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	
Task No. 476L	ASD-TR-67-1	
10 AVAILABILITY/LIMITATION NOTICES		
This document is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with prior approval of the C-141 System Program Office		
11 SUPPLEMENTARY NOTES	12 SPONSORING MILITARY ACTIVITY	
	C-141 System Program Office Wright-Patterson AFB, Ohio	
13 ABSTRACT		
<p>The primary purpose of this report is to present the structural load history information and the atmospheric turbulence data acquired and reduced for the C-141A Aircraft Flight Loads Data Program. Also included in this report are descriptions and discussions of the methods employed in the acquisition and processing of the data. The C-141A Aircraft Flight Loads Data Program was a single project which incorporated four separate concepts: an Interim Flight Loads Program, a Ground Loads Study, a Lead-the-Force Flight Loads Program, and an Atmospheric Turbulence Study. A total of from 28 to 35 aircraft at four Air Force Bases were employed at various periods during this effort to obtain structural load history and atmospheric turbulence data. Eight aircraft were instrumented for the acquisition of ground load experience data. A total data sample of 12,430 flight hours of flight loads data, 2,786 hours of atmospheric turbulence data, and 174.5 hours of ground load experience data was acquired and reduced during this program and is presented in this report. The structural load history data presented in this report is presently being employed in fatigue evaluations of the C-141A aircraft by the C-141 System Program Office. (This Abstract is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with prior approval of the C-141 System Program Office.)</p>		

DD FORM 1473  
1 JAN 64

**UNCLASSIFIED**

Security Classification



UNCLASSIFIED

## Security Classification

14. KEY WORDS	LINK A		LINK B		LINK C	
	ROLE	WT	R	WT	ROLE	WT
Maneuver Load Factors						
Loads Spectrum						
Mission Types						
Mission Phase						
Base - Tinker, Travis, Dover, Charleston						
Velocity Spectrum						
Altitude Spectrum						
VGH Program						

## INSTRUCTIONS

1. **ORIGINATING ACTIVITY:** Enter the name and address of the contractor, subcontractor, grantee, Department of Defense activity or other organization (*corporate author*) issuing the report.

2a. **REPORT SECURITY CLASSIFICATION:** Enter the overall security classification of the report. Indicate whether "Restricted Data" is included. Marking is to be in accordance with appropriate security regulations.

2b. **GROUP:** Automatic downgrading is specified in DoD Directive 5200.10 and Armed Forces Industrial Manual. Enter the group number. Also, when applicable, show that optional markings have been used for Group 3 and Group 4 as authorized.

3. **REPORT TITLE:** Enter the complete report title in all capital letters. Titles in all cases should be unclassified. If a meaningful title cannot be selected without classification, show title classification in all capitals in parenthesis immediately following the title.

4. **DESCRIPTIVE NOTES:** If appropriate, enter the type of report, e.g., interim, progress, summary, annual, or final. Give the inclusive dates when a specific reporting period is covered.

5. **AUTHOR(S):** Enter the name(s) of author(s) as shown on or in the report. Enter last name, first name, middle initial. If military, show rank and branch of service. The name of the principal author is an absolute minimum requirement.

6. **REPORT DATE:** Enter the date of the report as day, month, year, or month, year. If more than one date appears on the report, use date of publication.

7a. **TOTAL NUMBER OF PAGES:** The total page count should follow normal pagination procedures, i.e., enter the number of pages containing information.

7b. **NUMBER OF REFERENCES:** Enter the total number of references cited in the report.

8a. **CONTRACT OR GRANT NUMBER:** If appropriate, enter the applicable number of the contract or grant under which the report was written.

8b, &c, & 8d. **PROJECT NUMBER:** Enter the appropriate military department identification, such as project number, subproject number, system numbers, task number, etc.

9a. **ORIGINATOR'S REPORT NUMBER(S):** Enter the official report number by which the document will be identified and controlled by the originating activity. This number must be unique to this report.

9b. **OTHER REPORT NUMBER(S):** If the report has been assigned any other report numbers (*either by the originator or by the sponsor*), also enter this number(s).

10. **AVAILABILITY/LIMITATION NOTICES:** Enter any limitations on further dissemination of the report, other than those

imposed by security classification, using standard statements such as:

- (1) "Qualified requesters may obtain copies of this report from DDC."
- (2) "Foreign announcement and dissemination of this report by DDC is not authorized."
- (3) "U. S. Government agencies may obtain copies of this report directly from DDC. Other qualified DDC users shall request through \_\_\_\_\_."
- (4) "U. S. military agencies may obtain copies of this report directly from DDC. Other qualified users shall request through \_\_\_\_\_."
- (5) "All distribution of this report is controlled. Qualified DDC users shall request through \_\_\_\_\_."

If the report has been furnished to the Office of Technical Services, Department of Commerce, for sale to the public, indicate this fact and enter the price, if known.

11. **SUPPLEMENTARY NOTES:** Use for additional explanatory notes.

12. **SPONSORING MILITARY ACTIVITY:** Enter the name of the departmental project office or laboratory sponsoring (*naying for*) the research and development. Include address.

13. **ABSTRACT:** Enter an abstract giving a brief and factual summary of the document indicative of the report, even though it may also appear elsewhere in the body of the technical report. If additional space is required, a continuation sheet shall be attached.

It is highly desirable that the abstract of classified reports be unclassified. Each paragraph of the abstract shall end with an indication of the military security classification of the information in the paragraph, represented as (TS), (S), (C), or (U).

There is no limitation on the length of the abstract. However, the suggested length is from 150 to 225 words.

14. **KEY WORDS:** Key words are technically meaningful terms or short phrases that characterize a report and may be used as index entries for cataloging the report. Key words must be selected so that no security classification is required. Identifiers, such as equipment model designation, trade name, military project code name, geographic location, may be used as key words but will be followed by an indication of technical context. The assignment of links, rules, and weights is optional.

UNCLASSIFIED

Security Classification